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ENGLISH POPULATION IN THE EIGHTEENTH CENTURY¹

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FEW generalizations are so well established in the books as that which ascribes the increase in the population of England and Wales in the second half of the eighteenth century to a fall in the death-rate caused primarily by improvements in medicine, medical skill, and public health. Thus, for example, Dr Plumb writes:

After 1740, however, there was a steady growth of the population due to a marked, if small, decline in the death-rate. Almost certainly this was due to improved midwifery...and to the foundation of lying-in hospitals; the first kept the children alive, the second prevented them being exposed.²

Not unnaturally the view general among historians has been accepted by economists.

It seems probable...that the more or less stable-sized populations which seem to have been the rule before 1750 were due to a combination of high birth-rate with high death-rate. The principal development which upset this primitive equilibrium was a marked fall in the death-rate, due (beyond all doubt) to the improvements in sanitation and medical skill which were beginning to be effective in the north of Europe by the middle of the eighteenth century....³

So far as England is concerned, this conclusion rests principally on the notable work of Mr Talbot Griffith. The most substantial sections of his work, it should be noted, relate primarily to the period after 1780, and even for this period Mr Griffith's conclusions are more guarded than later generalizations based upon them; he allows more weight to movements in the birth-rate and to non-medical influences on the death-rate. But he too frames a general conclusion applying to the eighteenth century as a whole:

The birth-rate rose from 1710 to 1790 but the rise was not as spectacular as the fall in the death-rate from 1730 to 1810. The birth-rate was contributing

¹ I am greatly indebted to discussions with Mr Buckatzsch and Mr K. H. Connell.

² J. H. Plumb, *England in the Eighteenth Century* (1950), p. 78.

³ J. R. Hicks, *The Social Framework* (Oxford, 1942), p. 43.

in an important way. . . . The really important factor, however, is the fall in the death-rate.¹

And, in his view, the fall in the death-rate was due, not exclusively but at least to a very considerable extent, to improvements in medicine and public health.

This was not the view of eighteenth-century population growth which was held by some of the most observant contemporaries. In so far as they had a consistent theory of the subject, economic writers of the later eighteenth and early nineteenth centuries supposed that long-term changes in the size of the population were primarily the result of changes in the supply of or demand for labour. An increase in supply might arise from a fall in the cost of the labourers' customary standard of living; this would both induce earlier marriage and therefore more births, and also allow the survival of an increased number of the children born. An increase in demand for labour, by raising earnings and so increasing the labourers' command of their customary standard of living, would have a similar effect on both the age at marriage and the survival rate. Though the logic of this explanation allowed for factors influencing both supply and demand, most writers appear to have assumed, when they discussed the facts of their own day, that the most important influences operated on the side of demand. Adam Smith observed that, if the demand for labour were continually increasing, 'the reward of labour must necessarily encourage in such a manner the marriage and multiplication of labourers, as may enable them to supply that continually increasing demand by a continually increasing population'. 'What is essentially necessary', wrote Malthus, 'to a rapid increase of population is a great and continued demand for labour.' Nor was this belief confined to the systematic thinkers; 'Is it not evident', asked Arthur Young, 'that demand for hands, that is employment, must regulate the numbers of the people?'²

¹ G. Talbot Griffith, *Population Problems of the Age of Malthus* (Cambridge, 1926), p. 260. See also M. C. Buer, *Health, Wealth, and Population in the early days of the Industrial Revolution*, and J. H. Clapham, *An Economic History of Modern Britain* (2nd ed., Cambridge, 1930), I, 54-6. T. H. Marshall, 'The Population Problem during the Industrial Revolution', *Econ. Hist.* I (Jan. 1929), 429-56, presents a significantly different view of the problem, and I am greatly indebted to his article. In addition, see E. F. Heckscher, 'Swedish Population trends before the Industrial Revolution', *Econ. Hist. Rev.* 2nd ser. II (1949), 266-77, and K. H. Connell, 'Some Unsettled Problems in English and Irish Population History, 1750-1845', *Irish Historical Studies*, VII (Sept. 1951), 225-34. Eighteenth-century views are in process of being surveyed by D. V. Glass, 'The Population Controversy in Eighteenth-Century England. Part I. The Background', *Population Studies*, VI, 69-91.

² Adam Smith, *The Wealth of Nations*, ed. Cannan, I, 82. T. R. Malthus, *Principles of Political Economy* (2nd ed. 1836), p. 234. Arthur Young, *Political Arithmetic* (1774), p. 86; the whole of the section on population, pp. 61-86, contains pertinent observations on relations between population and demand. See also the same writer's *Political Arithmetic*, part II (1779), pp. 55-8. My attention was drawn to this literature by J. J. Spengler's 'Malthus's Total Population Theory: a Restatement and Reappraisal', *Canadian J. of Econ.* XI (1945), 83-110 and 234-64. The similar views of Benjamin Franklin are discussed by Spengler, 'Malthusianism in Eighteenth-Century America', *Amer. Econ. Rev.* XXV (1935), 691-8. The same type of explanation was advanced by certain French writers: see Paul E. Vincent, 'French Demography in the Eighteenth Century', *Population Studies*, I (1947-8), 70-1.

Which of these two explanations, or what particular blend of the two, we adopt is an important matter for our general interpretation of the Industrial Revolution in England. If the increase in population was primarily the result of improvements in medicine and public health, it may, for purposes of analysis, be regarded as an external factor in economic development, and it is reasonable to consider whether the Industrial Revolution was a response to the challenge of increasing population. But if the population increase was primarily a consequence of an increased demand for labour, we must look elsewhere for the mainsprings of economic change in this period. It is now over a quarter of a century since Mr Griffith wrote, and although little fresh evidence has appeared on English population movements in the eighteenth century, work has been done on the population problems of other periods and societies, and it may therefore be worth-while at this stage to review his conclusion in the light of later acquisitions of knowledge. This article is a first attempt at such a review. It is not the work of a demographer presenting fresh evidence, or applying new techniques to the existing evidence, but an attempt by someone interested in the genesis of the great industrial and agrarian changes to examine, in the light of some of the existing evidence, the balance of probabilities on the population problem in the eighteenth century.

One preliminary point needs to be emphasized. The statistics at present available do not allow more than an assessment of probabilities. All the global estimates of eighteenth-century birth- and death-rates depend, in greater or less degree, on the information, collected in the 1801 census, about the number of baptisms and burials in each parish for 1700 and every tenth year to 1780, and then for every year to 1800. The calculations based upon this information, though sometimes employing great ingenuity, necessarily involve a large number of debateable assumptions, and the final estimates are subject to a wide margin of error. Only a detailed analysis of these assumptions could demonstrate this point fully, but the fragile nature of any conclusions should be evident from the mere fact that for most of the eighteenth century the baptism and burial figures relate to only every tenth year—years which sometimes were clearly exceptional from a demographic point of view.¹

The evidence about population changes in pre-industrial societies suggests that there is a distinction to be drawn between the forces which determine the long-term changes in the size of the population, and those which determine short-term fluctuations. In section I we discuss short-term fluctuations.

I

One obvious feature of such societies was the marked fluctuation in death- and birth-rates. This is suggested by Mr Smith's study of the population of Barcelona between 1457 and 1590, by Professor Heckscher's work on

¹ Mr Joslin drew my attention to this point.

Sweden's population in the eighteenth century; as well as by the population history of India in the nineteenth and twentieth centuries.¹ Of these fluctuations those in the death-rate were much more violent than those in the birth-rate. The reason for this is obvious. In the nature of things, the range of possible fluctuation is much greater for the death-rate—from nobody dying in a year to everyone dying in a year—than for the birth-rate. In the period with which we are concerned, fluctuations in the death-rate were due primarily to harvest fluctuation and to the varying incidence of war and disease. The relative importance of these three factors is not now in question—on many occasions, it appears, it was less the deaths from war and famine which were significant than the scope which war and famine gave to the spread of disease—but all three tended to be violent in their effects. Fluctuations in the birth-rate, on the other hand, arose from causes which in their nature operated more slowly. Such fluctuations might arise from: (a) changes in fecundity: though there is no reliable evidence, it is sometimes suggested that there were such changes, arising from the periodic incidence of disease, changes in diet or a widening of the field from which marriage partners were chosen; (b) changes in the age distribution of the class of married women of child bearing age, variations, that is, in the proportion of married women in the particularly fecund age groups, arising from past changes in fertility or in death-rates; (c) changes in the age distribution of the total population; (d) changes in the age of marriage. In all these cases physiological fact and the stability of social habits limited the speed and range of fluctuation.

The fluctuations in the death-rate, besides being more violent, appear often to have been the effective cause of the fluctuations in the birth-rate; or, more properly, the fluctuations in the birth-rate were often the response of society to the periods of high mortality caused by war, famine and disease. Birth- and death-rates at any given time and place were obviously the result of a great variety of different influences; the effects of a period of high mortality were determined not only by the social structure of the region concerned, but by the causes and duration of the high mortality. But there is a sequence of reactions common to enough societies and occasions to be worth isolating.

We shall first consider the effect of a period of high mortality on *birth-rates*. Stripped of the complications which accompanied it in any specific case, the central sequence of events appears to have been this. Disease, famine and war caused a sudden reduction in the population of the region affected, but where they did not permanently injure the long-term capacity of the region to support people, this reduction tended to stimulate the birth-rate. This might happen in a number of ways. No doubt some of the ways which have been suggested look fanciful. It has been suggested, by Lavergne for example, that there is 'an inescapable physiological law which... ordains that the means of reproduction increase in propor-

¹ R. C. Smith, 'Barcelona Bills of Mortality and Population, 1457-1590', *J. Pol. Econ.* XLIV (1936); Heckscher, *op. cit.* and H. Gille, 'The Demographic History of the Northern European Countries in the Eighteenth Century', *Population Studies*, III, no. 1 (June 1949), 1-65.

tion to the chances of destruction.¹ As against this it might be argued that the hardships suffered during bad harvests would tend to injure reproductive capacity. But at least for two effects of high mortality on birth-rates there is reasonably good evidence. It is possible, first, that in certain circumstances, high mortality caused marriage to be deferred; this appears to have happened in Sweden during the very bad harvests of 1771 and 1772, and there are signs that it happened elsewhere. For this reason, the period after the years of high mortality saw an abnormally high marriage- and birth-rate. In the second place—and this is probably the effect of greatest importance—in the period after years of high mortality, people could afford to marry earlier; some sons of peasants inherited their father's holding earlier than would otherwise have been the case, landless men found it easier to obtain holdings, and wage-earners gained from the higher wages caused by the scarcity of labour. Hence earlier marriages and more births.

A period of high mortality tended also to have an effect on *death-rates* in the period that followed. In the first place disease and famine tended to weed out the weak and to leave a population that was tough and resistant. This was an immediate effect, and the fall in the death-rate from this cause alone was often great as well as sudden. There was also a longer-term effect which may sometimes have been important; as a result of the higher birth-rate stimulated by the high mortality, the population some time after tended to contain an abnormally high proportion of young adults, i.e. of the people least likely to die. For both these reasons the death-rate tended to be unusually low in the decades after a period of high mortality.

Thus, to sum up, the situation in the years immediately following a period of high mortality was a curious one. The total population was, of course, smaller than if there had been no period of high mortality, but the birth-rate was abnormally high, the death-rate abnormally low, and the *rate* of population increase, therefore, unusually high. The existence of this chain of reactions is very clearly suggested by Professor Heckscher's analysis of the Swedish statistics, and it receives some support from Mr Yule's conclusion, based on a study of several European countries in the period before their major industrialization, that in most cases a falling death-rate was associated with a rising birth-rate.²

There might well be further, if less uniform, reactions. Population growth, once stimulated, might be so vigorous that it went beyond the level prevailing before the period of high mortality, beyond the capacity of the economy in the long-run to support it at customary standards. For an acceleration of the rate of growth, once it started, was not easy to reverse; it tended to persist long after the circumstances which originally favoured it had ceased to exist. Earlier accession to the paternal holding, for example, or higher wages enabled people to marry earlier and produce

¹ *Rural Economy* (1855), pp. 366-7. I owe this reference to Mr Connell.

² G. Udny Yule, 'The growth of population and the factors which control it', *J. Roy. Stat. Soc.* LXXXVIII, 32; T. H. Marshall, *op. cit.* p. 434.

more children than they would otherwise have done. The disappearance of these favourable circumstances did not, however, provide an automatic adjustment. The additional children continued to exist and, in their turn, produced further children. Any rise in the age of marriage which might occur could not offset them. Nor did the lowering of living standards involved when population overshot the mark invariably apply a rapid check; Malthus's positive checks were often slow to appear, because people were frequently capable of reducing their customary living-standards substantially and for long periods. It was precisely in this situation, when a growing population was straining at resources and a large part of it living near the margin of subsistence, that a society was particularly vulnerable. In these circumstances harvest failure or an attack of disease might cause a disproportionately great rise in the death-rate and even complete social disaster. Such circumstances appear to account for the exceptionally severe effects of harvest deficiency on the Scandinavian death-rates between 1736 and 1743. The great Indian famines of the nineteenth century appear usually to have followed periods when conditions were exceptionally favourable, and population growth, we may reasonably suppose, exceptionally rapid. In a similar way, what made the effects of the failure of the Irish potato harvest so far-reaching was that it occurred in a society where the population had been increasing rapidly. Quite apart therefore from the incidence of disease and the vagaries of climate, there appears to have been some tendency to a periodical occurrence of periods of high mortality.

The model we have just described is a highly simplified one. In any particular society the interaction of the various forces was enormously complicated by the peculiarities of structure of the particular society, the extent of peasant proprietorship, for example, and the nature of inheritance laws. But the evidence available does suggest that this is a characteristic pattern of population change in pre-industrial societies. In essence it represents, much as Malthus said, a series of oscillations around a trend, oscillations which have some tendency to offset each other.¹

II

There is a contrast when we turn to consider what determines this trend, i.e. when we turn from short-term fluctuations to consider the long-term movement of population. In a number of pre-industrial societies for which we now have information, the most important influence on the long-term trend appears to have come from the side of the birth-rate. To this agency are commonly attributed (a) changes which have taken place over long periods in the rate of population growth in a single country, and (b) the differences in rates of growth, as between various societies at the same period of time. This is not to suggest that in pre-industrial societies there

¹ There is a good deal of evidence for the features of this pattern in chap. vii of Malthus's *Essay on Population* (1798). He remarked, e.g., on 'the rapidity with which even old states recover from the desolations of war, pestilence or the accidents of nature'. These countries 'are then for a little time placed a little in the situation of states with ample supplies of land' (pp. 109-10).

were no significant differences of death-rates in different periods and places. It is only to suggest that such differences as existed were probably slighter and less influential than those in the birth-rate. Thus the relatively slow rate of population increase of France in the later eighteenth century can most plausibly be attributed, as it was by some writers of the time, to a low birth-rate; there is no reason to suppose that the French death-rate was unusually high.¹ The rapid natural increase of population in colonial America was fairly clearly due in the main to a high birth-rate.² Mr Connell places the weight of his explanation of the rapid rise of Irish population upon factors influencing the birth-rate.³ Mr Aries suggests that the high density of the population of modern Brittany is due to the high birth-rate of this region.⁴ The figures given by Heckscher suggest that if Finland's population increased more rapidly than that of the other Scandinavian countries it was mainly because of her very much higher birth-rate.⁵

In such societies, the most likely causes of differences in the birth-rate were the age at and frequency of marriage, and probably of these two causes the former was the more important, though most of the argument that follows applies to both. 'The question of the age at marriage is at the heart of Irish population history.'⁶ This is probably true of most other pre-industrial societies. In its turn, the age at marriage is greatly influenced by economic opportunity, both directly as it affects the age at which a man can afford to marry, and indirectly as it influences general social attitudes to marriage. The age of marriage is of course influenced by a wide variety of factors, but there is a good deal to be said for the view that, in the societies with which we are concerned, difference of economic opportunity was the most important cause of differences in the age of marriage. Thus it is probable that even before the provisions in the *Code Napoléon* relating to inheritance, French peasant proprietorship favoured late marriage; the peasant had an incentive to defer marriage until he succeeded to the family holding—possibly indeed he had some incentive to delay it even further in order to limit the number of sons and diminish the likelihood of subdivision of the family holding. In colonial America, by contrast, there was an abundance of land and an active demand for labour and therefore a positive incentive to marriage. According to Heckscher the high Finnish birth-rate was due to the room for expansion afforded by the large amount of uncultivated land in Finland.⁷ Mr Aries suggests that the relatively denser populations of the western and eastern fringes of Europe are due to the fact that these regions were originally the

¹ For contemporary discussions see J. J. Spengler, *French Predecessors of Malthus* (Duke University, 1942), esp. chap. III, and *France Faces Depopulation* (Duke University, 1938) by the same author.

² See A. J. Lotka, 'The size of American Families in the Eighteenth Century', *J. American Stat. Assoc.* xxii (1927), 169.

³ K. H. Connell, *The Population of Ireland* (Oxford, 1950), p. 240.

⁴ Philippe Aries, *Histoire des Populations Françaises* (Paris, 1948), pp. 19-54.

⁵ Heckscher, *op. cit.* p. 275.

⁶ K. H. Connell, 'Land and Population in Ireland, 1780-1840', *Econ. Hist. Rev.*, 2nd ser., II (1949) 280.

⁷ Heckscher, *op. cit.* p. 278.

most sparsely settled.¹ The connexion of early marriage with economic opportunity—in this case the availability of holdings—has been demonstrated for Ireland by Mr Connell; there were more holdings partly because the spread of the potato, and the shift from pasture to arable facilitated subdivision and partly because more land was brought into cultivation. It was easier therefore for sons to acquire holdings and marry early. A similar train of events seems to have followed the rise of kelp production in the Western Highlands of Scotland.²

The response of population to a given increase in the opportunities depended on a variety of circumstances. In a society where every one normally married as soon as physiologically possible there would be no scope for an increase of marriages when economic opportunities developed. The assumption we have made, and which is indeed crucial for the present argument, that, in the societies under discussion, there was such scope is one which clearly needs to be verified by detailed investigation of the age at marriage and the frequency of marriage. But it is not an improbable assumption, and has some contemporary warrant. 'The growth and increase of mankind', wrote Halley, 'is not so much stinted by anything in the nature of the species, as it is from the cautious difficulty most people make to adventure on the state of marriage, from the prospect of the trouble and charge of providing for a family.'³ The attitude of labourers towards their customary standard of living is also an important factor; where they chose to employ an increased command over resources, not to marry earlier but to improve their standards, the mechanism we have described would not of course operate. A great deal depends too on the size of the gap between the minimum subsistence level and the customary standards; the lower the standard of living at the start of the population increase, the more likely was it that the increase would be halted by Malthus's positive checks. Societies varied greatly in respect of such conditions, but, among those we have mentioned, an increase in economic opportunity appears in all cases to have stimulated some growth of population.

III

With this general picture in mind we can re-examine the thesis that the increase of population in eighteenth-century England was due to a fall in the death-rate induced by medical and similar improvements. That there was a fall in the death-rate towards the end of the century is not in question; indeed, as Mr Griffith pointed out, the fact was clear to contemporaries including Malthus himself.⁴ It appears, too, on the figures at present available, that an important difference between the 1770's and

¹ Aries, *op. cit.* pp. 23-5.

² Malcolm Gray, 'The Kelp Industry in the Highlands and Islands', *Econ. Hist. Rev.*, 2nd ser., iv (1951), 204-5.

³ E. Halley, 'Some further Considerations on the Breslau Bills of Mortality', *Proc. Roy. Soc.* (1693), no. 198, p. 654. See also R. Cantillon, *Essay on the Nature of Trade*, ed. H. Higgs (1931), p. 81.

⁴ See Malthus, *Essay on Population* (2nd ed. 1803), p. 311; Marshall, *op. cit.* p. 430.

the 1780's is that the death-rate was rising in the former decade and falling in the latter. But it by no means follows from this that the fall in the death-rate was the most important cause of the population increase. For what is in question is the nature of the fall of the death-rate. Griffith takes the view that the fall is due to an increase in the expectation of life, particularly an increase in the expectation at birth. People were living longer, primarily because of improvements in medicine and public health. Professor T. H. Marshall, whose general emphasis differs significantly from that of Griffith, states categorically that 'the chief feature of the falling death-rate was a rapid decline in infant mortality'.¹ Now it is essential to Griffith's argument that the fall in the death-rate should represent an increase in the expectation of life, and furthermore an increase of a sort that would increase the number of potential parents in the population. It will not do if it is merely a question of people surviving to 70 who would previously have died at 60; this would produce some increase of population, but not a cumulative increase of the sort that has to be explained. The evidence, however, that there was an increase in the expectation of life in the eighteenth century is not systematically examined by Griffith, and it turns out to be rather fragile. And the alternative possibility is not considered that the fall in the death-rate was due to a change in the age-composition of the population.

It is true that Rickman believed himself to have proved that 'Since 1780 life has been prolonged as 5 to 4'.² But such reliable evidence as there is for the eighteenth century relates only to the area covered by the Bills of Mortality for London. These were the basis for some ingenious calculations by Dr Brownlee, from which it appears that in the area covered by these Bills, 'a very remarkable fall in infant mortality took place'.

From 1730 to the end of the century there is a steady decline in the number of the deaths of children under 2 years, the death-rate at the end of the century being only 60 per cent of what it was in 1730-40.³

According to Brownlee, the infant mortality in London in the last decade of the eighteenth century was not very much higher than in the decade 1861-71. There are other calculations from the same source which confirm this conclusion.⁴

There are, however, three observations to be made about these statistics. In the first place, the figures relate only to the expectation of life of infants; at later ages Dr Brownlee found no improvement of any moment in the expectation of life in the eighteenth century. Secondly, they exaggerate the decline in infant mortality over the century as a whole. The deaths under the age of two in the decade 1731-40 were a peak; the period was

¹ Marshall, *op. cit.* p. 435.

² Quoted by Griffith, *op. cit.* p. 20.

³ J. R. Brownlee, 'The Health of London in the Eighteenth Century', *Proc. Roy. Soc. Med.* (1925), xviii, Epidemiology section, p. 76.

⁴ M. D. George, 'Some causes of the increase of Population in the Eighteenth Century as illustrated by London', *Econ. J.* xxxii (1922), 346-7; Thomas Bateman, *Reports on the Diseases of London* (1819), p. xi.

at the height of the gin-drinking mania. Deaths under 2 were not recorded until this decade, but if with Brownlee one assumes that deaths from convulsions (for which figures are available from the beginning of the century) are a reliable index of infant mortality, the fall between the beginning and end of the century, though substantial, is much less dramatic. The third and most important limitation is that the figures relate only to the area covered by the Bills of Mortality, i.e. to the Greater London of that day. Can we presume, from the London evidence, a similar decline in infant mortality throughout the country as a whole? Brownlee's estimates of the crude death-rates suggested to him that 'in the eighteenth century there is very little difference between the mortality in London and England as a whole'.¹ His own estimates, however, show a curious feature. In every decade between 1701 and 1770, except in the decade 1751-60, the London rate was higher than the English rate; but, in the decades 1771-80 and 1781-90, it was lower, and in the decade 1791-1800 the same. The estimates will not stand much strain, but may not this uncharacteristic behaviour of the London rate after 1770 be due to a decline in London infant mortality which was not shared by the country generally? It is not improbable. For, in view of nineteenth-century experience, it would be surprising if, in the eighteenth century, the infant mortality rate for the country as a whole had fallen *in advance* of the general death-rate. Moreover we can conceive good reasons why the history of infant mortality in London should have been exceptional. Much of the fall in infant mortality from the peak of 1731-40 was probably a result of the decline in gin-drinking and may represent no more than a return to the level prevailing before gin-drinking became widespread. Gin-drinking was essentially a London vice, and there is no reason to expect in the rest of the country the sort of rise and fall that seems to have taken place in London. In so far as there was a genuine fall below the level prevailing before the gin decades, it appears to have been due to improvements that are unlikely to have had much influence outside London and some of the larger towns, to better arrangements for parish children after the 1767 Act, to the extension of the lying-in hospitals, to improvements in draining and paving.

The London mortality figures are, therefore, an unreliable guide. The only evidence of a statistical kind relating to the country as a whole is derived from the data on ages given in the censuses for 1821 and 1841. Using this source, Brownlee was able to compare the survivors of the people born in the various decades of the eighteenth century. For every 1 male born between 1761-70 who survived in 1821, 1.274 males born in 1781-90 survived to 1841; but for every 1 male born in 1771-80 who survived to 1821, 1.363 males born 1791-1800 survived to 1841; and for every male born 1781-90 who survived to 1821, 1.479 males born 1801-10 survived to 1841.² The proportion in *italics* increases until the end of the century. The increase in this ratio of survivals Brownlee interpreted as evidence of a decline in the death-rate, because the birth-rates he had

¹ Brownlee, *op. cit.* p. 75.

² Brownlee, *op. cit.* Table v, p. 76.

calculated did not provide an explanation. But the alternative explanation is still open to us that it was due to an increase in the birth-rate, i.e. that more were surviving because more were being born. For it seems highly probable that the birth-rates which Brownlee calculated underestimate the births in the second half of the eighteenth century; he assumes that the deficiency in baptismal registration was constant, whereas the spread of non-conformity alone suggests that the deficiency must have increased over this period. The first argument for agnosticism about the explanation under discussion is therefore the unsatisfactory nature of the statistical evidence for an increase in the expectation of life in the later eighteenth century.

In the second place, the improvements in medical services, and in allied fields, which are adduced to explain the fall in the death-rate, and which, in the absence of satisfactory statistical evidence, remain the main reasons given for supposing that there *was* an increase in the expectation of life, look curiously inadequate to sustain so large a conclusion. The checking of small-pox is of obvious significance, but, as Mr Griffith says, it belongs to the early nineteenth century rather than to the eighteenth; and the other advances in medical knowledge do not look as though they could have been of very general demographic importance. The new hospitals were few and confined to the towns. Improved sanitation was no doubt of greater effect since it diminished the importance of such diseases as typhus, but sanitary improvement was likewise an urban phenomenon, and the towns where improvements were made contained, after all, only a minority of the population. A general increase in the expectation of life cannot be inferred from such improvements, and if later statistical research proved that there had, in fact, been a significant increase in expectation of life in eighteenth-century England, we should have to look beyond such improvements for an adequate explanation. The view under discussion has sometimes been supported by reference to some more recent examples of population increase in which, by common consent, medical improvement has played a large part. But the parallel is not accurate, for there now exists a large corpus of medical knowledge and experience which, when a country starts to modernise itself, can be assimilated with sufficient speed to produce important demographic results. This was very far indeed from being the case in eighteenth-century England.

Neither the statistical nor the medical arguments in favour of the view under discussion are, therefore, at all conclusive. Furthermore, there is an alternative explanation of the fall in the death-rate, that it was the result of changes in the age composition of the population brought about by the rising birth-rate of earlier decades, and the result also, perhaps, of the existence of a smaller proportion of vulnerable people in the population. On this reading of events, the fall in the death-rate would be a fall of the type that often followed after a period of high mortality; it would register changes due to other causes, and not be itself a prime cause of cumulative population increase. It is impossible to say, on the statistical evidence

available, how much truth there is in the alternative explanation, but it has a certain plausibility. The fluctuations of birth- and death-rates do suggest that the influences we have discussed earlier may in some degree have been present in eighteenth-century England, and though it would be foolish to place much confidence in the short-term movements revealed in such notoriously imperfect statistics, one could make out a case for the contention that the figures do betray some suggestion of the pre-industrial pattern of population growth. They show a marked rise in death-rate from 1700 to 1730 and a second slighter rise—very slight on Brownlee's figures—between 1760 and 1780. Thus we have two periods of high mortality, the first commonly associated with an increase in gin-drinking but probably more reasonably attributed to bad harvests of the period, the second and slighter coinciding with a period of bad harvests. During both these periods there was a quickened rise in the birth-rate which continued for a decade or two beyond, and after each of these two periods there was a fall in the death-rate. There are perhaps signs here of a compensating movement of the sort we have analysed earlier; indeed, as Professor Marshall has suggested, the fall in the birth-rate and the rise in the death-rate in the 1830's may also have been in part the result of equilibrating forces. All this suggests that the fall in the death-rate from 1730 to 1760 and the much greater fall from 1780 to 1810 may, in some degree, have been reactions to periods of high mortality.

IV

We turn now to consider the long-term changes. The most striking feature here is the rise of the birth-rate which climbed to 1790, and remained thereafter for several decades at a very high level. Whatever changes later research introduces into our picture it is unlikely to overthrow the conclusion that the birth-rate was higher in the second half of the eighteenth century than in the early decades. To what extent was it this factor which was responsible for breaking the pre-industrial pattern of population change in England, and for precipitating the marked and continuing increase of population in the second half of the century? It is of course true that a high birth-rate, no less than a low death-rate, may be the result of changing age-composition, the result of earlier increases in births and/or of the saving of infant or other life. In so far as the high birth-rate of the later eighteenth century was due to a rise in the birth-rate at some earlier period, it is still the birth-rate that is the operative factor. The possibility that it was due to an earlier saving of life is more critical for our argument, and we shall consider it later; but the long period during which the birth-rate was sustained at a high level, and the nature of contemporary comment, makes it likely that there were other circumstances than a favourable age-composition which favoured an increase in births. One such factor may have been a fall in the age at marriage.

According to contemporary theory there were two principal ways in which marriages, and so births, might be stimulated; the labourers'

command over their customary necessities might increase, on the one hand because of a fall in the price of these necessities, and, on the other, because of an increase in earnings. Now there were in the eighteenth century considerable improvements in agricultural efficiency, and there is no logical difficulty about supposing that these stimulated a lowering in the age at marriage. But the supposition could be reconciled with the facts only by making some rather unpalatable assumptions. So far as the cost of necessities is concerned, the long run of good harvests between 1730 and 1755 was probably of greater significance. The importance of this long period of cheap grain in the genesis of eighteenth-century industrial and population changes has never been adequately explored. Malthus took the view that the cheaper food of these years did not produce a proportionate increase of population but that 'their [the labourers'] increased corn wages, instead of occasioning an increase of population exclusively, were so expended as to occasion a decided elevation in the standard of their comforts and convenience'.¹ If he was right, it may well be that the Industrial Revolution was stimulated by the increase in the demand for 'comforts and conveniences' released by this long period of low food prices. But the increased command over subsistence may also have favoured earlier marriages, and thus given an impetus to population increase.

Malthus himself, however, and most earlier writers who wrote in a similar vein, laid most stress, not on the decline in the cost of a subsistence diet, but on an increase in the earnings, or, more accurately, the resources of labourers. These resources were enhanced in the second half of the eighteenth century by an increase in the economic value of children in industrial employment, and by the system of family allowance involved in the Speenhamland arrangements.² It seems clear, however, that the stimulus Malthus had mainly in mind was an increased demand for labour. The greater demand for labour increased the earnings of the wage-earner and so enabled him to marry earlier. This point was crucial to Malthus's argument; the age at marriage was the mechanism linking demand for labour with population. 'Employment', Malthus argued, 'regulates the wages of labour on which the power of the lower classes of people to procure food depends; and according as the employment of the country is increasing, whether slowly or rapidly, these wages will be such as either to check or encourage early marriages, such as to enable a labourer to support only two or three or as many as five or six children.'³

Some eighteenth-century writers appear to have thought that industrialization itself, as distinguished from an increased demand for labour, would stimulate population growth. Population growth depended on an increase

¹ Malthus, *Principles*, pp. 228-9.

² Malthus, *Essay*, pp. 83-94. Malthus's views on this subject are apt to be misinterpreted. He did not argue that people had more children in order to profit from the earnings of children in factories, or to enjoy larger poor-law benefits. His point was that the prospect of parish relief and the earning capacity of children at an early age reduced the force of the incentive to postpone marriage.

³ Malthus, *Essay* (2nd ed.) p. 471.

in the demand for labour and this, in turn, on an increase in the effective demand for goods. But the growth of effective demand might be checked by hoarding, and also by what seems to have been the possibility foremost in their minds, by a desire for leisure. 'The luxury of indolence tends always to swamp the luxury of goods.' These writers feared that people might avail themselves of any improvement in their powers of production to enjoy increased leisure rather than consume more goods. Should this happen, effective demand would not be sufficient to maintain production at the level warranted by existing resources and techniques. And where production was restrained, population growth was hindered. Signs of this attitude are to be found in Steuart,¹ and traces of it can be seen in Malthus. Industrialization would help to remove this check to population growth in two ways. It tended in the first place to create a succession of new tastes among consumers. The technical possibilities of increased production, and so of increased demand for labour, were therefore less likely to be frustrated by failure of effective demand. Secondly, industrialization tended to produce a distribution of income less in favour of the rich, whose demand was for goods with a small labour content, and more in favour of those whose demand was more for goods with a high labour content. Demand for goods with a high labour content had a more stimulating effect upon population.

There is therefore a case for supposing that the new industrial changes were stimulating population increase. There is also reason to suppose that the decay of older institutions of peasant proprietorship and the master craftsman may have had a similar effect. Professor Tawney suggested long ago that, by postponing the age of maximum earning power, these institutions tended to defer the age of marriage and so to curb population increase, and that the decay of these institutions may have had the reverse effect.² Labourers reached their maximum earnings earlier than peasants and, moreover, did not have the incentive to limit births in order to keep the family holding intact.³

It is one thing to indicate the ways in which the expansion of economic opportunities may conceivably have stimulated population increase. It is quite another thing to demonstrate that these were the most important stimuli, and to distribute responsibility between them. Some of the mechanisms which contemporaries believed to have been at work are unlikely ever to be fully verifiable, and may have to rest permanently on grounds of general plausibility. Others need a generation of collaborative work on parish registers and other local sources; it may be possible, for example, to find out whether marriage habits, particularly age at marriage, varied significantly according to period, region and social group. But this much can be said now. There is contemporary warrant for the view that the acceleration of population growth in the later eighteenth century was to a very large extent the result of a high birth-rate, and that this in

¹ Sir James Steuart, *Works* (Dublin, 1770), I, 38-40, 44, 47, 157, 193.

² R. H. Tawney, *The Agrarian Problem in the Sixteenth Century*, (1912), p. 104 n. 3.

³ There is a good discussion of the effects of economic conditions on age at marriage in Griffith, *op. cit.* pp. 106-28.

turn was the result of the economic developments of the period. On the evidence so far published there is no positive reason for rejecting this view, and it does in fact accord better than the explanation which at present holds the field with what we know about the mechanism of population change in other comparable societies.

V

In this essay we have opposed to each other two explanations of population growth in the eighteenth century, one which attributes it to a fall in the death-rate, induced by improvements in medicine and public health, the other which attributes it primarily to an increase in births induced by widening economic opportunity. But these do not, of course, exhaust the possibilities. Despite the unsatisfactory state of the statistical evidence, there may have been an increase in the expectation of life, particularly at the earlier ages, due—or due in the main—to causes other than improvements in medicine and sanitation. M. Goubert's study of the population of Auneuil shows that the expectation of life was higher in the later eighteenth century than in the second half of the seventeenth.¹ The high mortality of the later seventeenth century, he suggests, was due to the concentration of a number of very bad harvests, as a result of which, population increase, which had been rapid before the Fronde, was continually thrown back. In England, too, there were a number of very bad harvests in the later seventeenth and early eighteenth centuries. The period between 1730 and 1755, on the other hand, saw a long run of good harvests; only one harvest, that of 1739–40, was decidedly unfavourable.²

There is no doubt that such runs of bad and good harvests were of considerable demographic importance in England as in France. The difficulty is in knowing how far they were a natural, and how far a social phenomenon, how far the exclusive offspring of wind and weather, and how far the symptoms of population change initiated by other agents. What is the explanation of the occurrence of a run of bad harvests and a period of high mortality? Is it that, simply because of chance climatic variation, the harvest yields were exceptionally poor? Or that the yields were not in fact exceptionally poor, but that small deficiencies caused high death-rates because population growth and falling living standards had already made the society vulnerable? Or is it that yields *were* exceptionally low, not however because of climatic variations, but because a growing population had been trying to extract from the soil more than was warranted by existing techniques? In a somewhat similar way, it is difficult to determine how far the existence of a run of good harvests with the absence of high death-rates is merely the reflexion of the emergence of a more prudent balance between population and resources. To settle the point we need detailed studies of particular localities, but until these appear we may conjecture, on the basis of the contemporary

¹ Pierre Goubert, 'En Beauvaisis: Problèmes démographiques du XVII^e siècle', *Annales* (Oct.–Dec. 1952), p. 457.

² Thomas Tooke, *History of Prices* (1838), I, 59.

descriptions of weather, that at least the long run of harvests in the 1730's and 1740's was primarily a natural phenomenon. We have already discussed the possible effect of these good years on marriages. Here the point is a different one—their effect on survival. The mere absence of the severe dearths which had been of major importance in checking population, would have resulted in a more rapid increase in the eighteenth century.

It is sometimes suggested that, quite apart from any such run of good harvests, there was in the course of the eighteenth century a long-term improvement in nutrition, and therefore greater resistance to disease. M. Goubert points out that the bad seasons of 1770 and 1788 in France did not cause such heavy deaths as did the bad seasons of the later seventeenth century.¹ And there is some suggestion that in England likewise the bad harvests of, for example, 1793–5 and 1798–1801 did not have so severe effects on the death-rates as those of earlier periods. Is this a sign that the population of the later eighteenth century was better fed? An improvement in nutrition might have occurred in two ways. First, by an increase in labourer's earnings. Though many observers, Young and Malthus for example, wrote as if an increase in earnings had its main effect on marriage habits, it would be quite consistent with their views to suppose, as did Adam Smith, that the main result of 'the liberal reward of labour' was that it enabled labourers 'to provide better for their children, and consequently to bring up a greater number'.² An improvement in nutrition might also have occurred because of an increase in the quantity and nutritional content of food due to developments in agriculture. Improved nutrition, whatever its origin, is clearly a possibility that cannot be ruled out, but it is one which it is particularly difficult to assess. On occasion, the mere fact that there was an increase in total food output in the eighteenth century has been taken as sufficient proof of improved nutrition. But the relevant question is whether there was any increase in consumption per head, and this is still an open question. The wide regional variations of diet, no less than the scantiness of the evidence, makes any judgement dangerous, but the surviving examples of labourers' diets hardly suggest that any improvement in their diet can have been substantial. Even without any long-term improvements in nutrition, it would not of course be surprising if England in the later eighteenth century were less vulnerable to bad harvests, since improvements in marketing and transport must have had the effect of alleviating local deficiencies; the poor-law arrangements, too, whether or not they improved the general position of the poor, mitigated the effects of bad harvests, since it was then that poor-relief payments tended to be highest.

It is still open to us to believe that, for any of the reasons just discussed, the prospects of survival were better than in earlier periods, and that this was a major factor in the population increase of the period. But if we consider the one of these factors most likely, on the face of it, to have had wide demographic effects, i.e. the improvement in food production, it seems plausible to regard it, not as a positive source of population increase

¹ Goubert, *op. cit.* p. 468.

² Adam Smith, *op. cit.* I, 81.

by its effect on survival, but as a development which allowed an increase to gather way which was primarily due to other causes. Its main demographic importance, that is, was to defer the operation of the Malthusian positive checks. Was it because, at earlier periods, agricultural output in England responded only sluggishly to the demands of increasing population that population growth was retarded? It might be argued that, because of social impediments to enclosure and because of technical ignorance, population increase, in the sixteenth century for example, tended to raise prices rather than increase production, and thereby provoked the application of the positive checks. By the mid-eighteenth century, because of such developments as changes in the agrarian structure and the wider diffusion of technical knowledge, English agriculture was much more capable of responding to the demands of increasing population, and for this reason an increase of population, once started, tended to proceed much further.

We shall now attempt to sum up. Any stimulus to the rate of population growth in pre-industrial societies—an increase in the ratio of resources to population, for example, or a run of good harvests—tended to have a cumulative effect. Even where the food supply could not easily be increased, the movement so generated might persist a long time before it was halted by famine and disease; and where, as in eighteenth-century England, the supply of food was capable of considerable expansion, population might continue to increase for a considerable period. An appreciable part of the population increase in England in the eighteenth century may be due to the operation of such traditional stimuli in an unusually favourable agricultural environment; and if this is so the burden of explanation we must impose upon some new force is correspondingly diminished. But new forces there evidently were in the later part of the century. The question is whether they were the improvements in medicine and public-health, or the increase in economic activity in the period. One purpose of this essay is to argue that we have been premature in our rejection of the traditional answer to this question, and to suggest, in the light of our knowledge of the mechanism of population change in pre-industrial Europe, that the acceleration of population growth was primarily the result of specifically economic changes, and in particular of an increase in the demand for labour. This still leaves open the mode of operation of this increased demand. Was its principal effect to lower the age at marriage, and in this way to increase births? Or to increase the ability of the labourers to feed their children? The second purpose of this essay is to reinstate, as a hypothesis, the view that the first effect was the more important, i.e. that the increased demand operated more via the birth-rate than the death-rate. Its final purpose is to urge that the causation of the eighteenth-century population increase is still an open question, and that the statistical evidence does not allow to choose with confidence between the explanations that are logically possible.

NAVAL DOCKYARDS UNDER THE LATER STUARTS¹

By D. C. COLEMAN

THE travellers and topographers of later seventeenth- and early eighteenth-century England often commented fulsomely upon the naval dockyards of the time, admiring their size and noting their growth since Tudor times. As French wars succeeded Dutch wars, so did Portsmouth and Plymouth rise to importance alongside the existing yards at Chatham, Deptford and Woolwich.² In his 1695 edition of Camden's *Brittania*, Gibson observed that the Navy had multiplied five- or six-fold in ships, tonnage and men since Camden wrote; he paid tribute to the corresponding expansion in the Chatham yard which, in due time, Defoe was to describe as 'monstrously great and extensive', resembling 'a well-ordered city'.³

What was the reality behind these and like observations?

It is the purpose of this article to examine the nature of the naval dockyards as industrial entities,⁴ to assess their economic significance in certain directions and to consider them in relation to civil shipbuilding. In the light of this it is proposed to discuss some of the conclusions reached by Professor J. U. Nef concerning the characteristics of shipbuilding in seventeenth-century England. An important pillar in the edifice of the 'industrial revolution' which Professor Nef has perceived as taking place in the period 1540-1640 is the growth of large-scale shipbuilding.⁵ Writing of this country and that century, he has claimed that 'shipbuilding... had long been organized in large-scale units, for while smiths and carpenters, sail and rope makers might prepare the materials in their own households,

¹ This article was written and submitted for publication before the appearance of Mr J. Ehrman's book *The Navy in the War of William III, 1689-97* (Cambridge, 1953). No significant amendments have been made as a result of reading this work although a number of references to it have been incorporated in the text and footnotes. Mr Ehrman's highly detailed study of naval matters during the eight years in question seems to confirm the general tenor of the arguments used in the present article in reference to the whole period from 1660 to 1714.

² Harwich, Sheerness and Kinsale were also developed for naval purposes. For general information on the dockyards, see the Victoria County History for the appropriate counties, especially the Maritime History section in *V.C.H. Hampshire*, v, 359-467; *V.C.H. Kent*, II, 243-388; and *V.C.H. Essex*, II, 259-312. See also R. G. Albion, *Forests and Sea Power* (Cambridge, Mass., 1926); and Ehrman, *op. cit.* chap. III.

³ D. Defoe, *A Tour through England and Wales, 1724-6*, Everyman Ed., I, 105-10; Camden's *Brittania, Newly Translated in English: with large Additions and Improvements*, ed. Edmund Gibson (1695), p. 229. See also Defoe, *op. cit.* I, 97-9, 135-9, 230-1; *The Journeys of Celia Fiennes, 1685-1698*, C. Morris ed. (1947), pp. 53, 123; Thomas Philipott, *Villare Cantianum or Kent Surveyed and Illustrated* (1659, ed. 1776), p. 161.

⁴ Their administration will not be considered. See on this, J. R. Tanner, *Samuel Pepys and the Royal Navy* (Cambridge, 1920); M. Oppenheim, *History of the Administration of the Royal Navy, 1509-1660* (1896); and Ehrman, *op. cit. passim*.

⁵ J. U. Nef, 'The Progress of Technology and the Growth of Large Scale Industry in Great Britain, 1540-1640', *Econ. Hist. Rev.* v (1934), 3-24. See also his 'A Comparison of Industrial Growth in France and England from 1540 to 1640', *Journal of Political Economy*, XLIV (1936), 289-317 and 505-33, and 'War and Economic Progress, 1540-1640', *Econ. Hist. Rev.* XII (1942), 13-38.

the shipyards where these materials were assembled were large and costly establishments in which many workers laboured for wages'.¹ In a recent work, expanding such themes as these and extending them in time, he has attempted to assess the comparative significance in such advances of the needs of war and the problems of peace. The growth of the English Navy in the sixteenth and seventeenth centuries is observed as leading to the 'establishments and expansion of large industrial plants such as those at Chatham, Portsmouth and Woolwich', but in general, commerce rather than war is seen as setting the pace in shipbuilding's progress. Professor Nef stresses the growing size of commercial vessels, most of which, he claims, were by early Stuart times 'coming to be built in sizeable shipyards owned by private capitalists'.²

I

Before considering the dockyards in any detail, it is perhaps worth underlining the significance of two main factors relevant to the Navy and naval shipbuilding at this time. In an age of commercial rather than industrial rivalry between nations, the importance of the merchant marine was closely linked with that of the Navy. Sea-power and commerce, colonies and seamanship were motifs in a complex pattern in which the Navigation Acts and the fisheries, the coal trade and the naval dockyards all had their appropriate places. Consequently, the distribution of the state's expenditure tended whether directly through the deliberate fiat of policy or indirectly through the intrusive pressure of interests, strongly to reflect the power of such maritime matters. The succession of wars periodically brought naval spending to a very high proportion of total outgoings in the public sector, whilst even in more peaceful years the maintenance of a large fleet normally constituted a dominant item of expenditure.

Table 1 provides a rough quantitative illustration of this, showing the high relative figures, the variations between peace and war and also the rise in absolute amounts over the period. Hopes of peace after the second Dutch war saw £200,000 as an optimistic aim for annual naval expenditure of which £100,000 was to be for maintaining ships in harbour and the remaining half for setting them to sea.³ Of an estimated annual cost in 1671 of £660,434, the 'charge of a year's fleet manned with about 60,000 men' accounted for £312,000 and the balance covered shipbuilding, maintenance, yards and the like.⁴ The following forty years brought expenditure which made these earlier sums seem trifling, bringing, too, a corresponding extension in the Navy's economic demands.⁵ Thus over the whole period, embracing both peace and war, an average of approximately a quarter of the state expenditure was directed to naval needs, exclusive of naval ordnance. Out of these totals, then, the construction

¹ *Econ. Hist. Rev.* v (1934), 20-1.

² J. U. Nef, *War and Human Progress* (Cambridge, Mass., 1950), pp. 84-8.

³ Tanner, *op. cit.* pp. 41-2.

⁴ J. R. Tanner (ed.), *A Descriptive Catalogue of the Naval Manuscripts in the Pepysian Library* (Navy Records Society, 1903-9), I, 105.

⁵ Though not a *relative* increase as compared with that of the Army's demands.

Table 1*

Period	(i) Total Government expenditure £	(ii) Expenditure on Navy £	Percentage (ii) to (i)	Source
1661-2	1,000,849	172,321	16	<i>Calendar of Treasury Books</i> (ed. W. A. Shaw), 1660-7, pp. xxxii-xxxiv
1662-3	1,613,530	516,382	30	
1663-4	1,362,664	303,315	22	
1664-5	1,268,261	300,484	25	
1665-6	2,640,840	1,467,593 [†]	56	
1666-7	1,928,924	166,372 [†]	8	
1667-72	No adequate figures available			
1673-4	2,565,134	865,312	34	<i>Ibid.</i> 1672-5, p. xxii
1674-5	1,848,072	549,106	30	
1675-6	1,268,533	236,506	19	<i>Ibid.</i> 1676-9, p. xv
1676-7	1,832,650	516,528	28	
1677-8	2,714,121	658,535	24	
1678-9	No adequate figures available			
1679-80	2,078,665	806,266	39	W. R. Scott, <i>Joint Stock Companies to 1720</i> (Cambridge, 1911-12), III, 540-1
1680-1	1,434,626	362,501	25	
1681-2	1,163,983	357,081	31	
1682-3	1,123,861	363,513	32	
1683-4	1,145,577	331,791	29	
1684-5	1,250,124	368,950	30	<i>Cal. T.B.</i> 1685-9, p. xxix
1685-6 [†]	1,730,228	355,405	21	
1686-7 [†]	2,093,827	444,805	21	Scott, III, 542
1687-8 [†]	2,333,220	469,980	20	
1688-91 [†]	11,820,004	3,098,289	26	<i>Cal. T.B.</i> 1689-92, pp. cciv-ccxvi
1691-2 [†]	4,501,108	1,239,209	28	
1692-3 [†]	5,832,807	1,925,328	33	
1693-4 [†]	6,213,683	2,131,694	34	
1694-5	6,816,343	1,890,151	28	
1695-6	8,938,787	1,922,451	22	<i>Ibid.</i> 1695-1702, pp. ccxxvi- cccccxxv
1696-7	8,264,167	2,821,931	34	
1697-8	5,971,710	877,455	15	
1698-9	6,113,178	1,232,066	20	
1699-1700	4,775,615	818,635	17	
1700-1	4,093,723	1,046,397	26	<i>Ibid.</i> 1703, pp. cix-clxiii
1701-2	5,544,677	1,137,502	21	
1702-3	6,678,463	1,981,854	30	
1703-4	7,648,937	1,871,702	25	
1704-5	7,141,650	1,618,654	23	
1705-6	8,609,298	2,049,309	24	<i>Ibid.</i> 1705-6, pp. cxxxvii-clxix
1706-7	9,868,863	2,251,890	23	
1707-8	8,798,761	1,883,540	21	<i>Ibid.</i> 1708 (Introduction), pp. cxxi-clxiv; ccxiii-ccxxvii
1708-9	10,209,830	2,022,447	20	
1709-10	11,152,761	2,156,331	19	<i>Ibid.</i> 1709, pp. cl-clxxix
1710-11	10,312,935	1,492,476	15	
	Average percentage			24

* These figures are quoted in order to give an impression of the general order of magnitude. Closer examination reveals discrepancies and the degree of accuracy is sometimes questionable. For instance, for the years marked † slightly different figures are quoted by Scott (III, 541-3). See also Ehrman's comments, especially pp. 165-70, 462n., 470n., 470-2. Another set of slightly different figures for naval expenditure from 1689 will be found in *British Parliamentary Papers 1868-9*, vol. 35, pt. 2, p. 693.

Excluded from col. (ii) above are the figures for naval ordnance which, in the accounts of national revenue and expenditure, are included along with all other ordnance supplies under a separate general heading.

† These figures are almost certainly lower than the true amounts, for in 1665 there appears a new category of expenditure: 'Extraordinaries for the Dutch War' under which heading payments of £191,555 and £689,085 are noted for 1665-6 and 1666-7 respectively.

and repair of ships, the maintenance of the dockyards and bases accounted, on the average, for about a half.

This leads to the second main point to be noted: naval ships and naval shipyards were very much larger than their civilian counterparts of the seventeenth century or, indeed, of the eighteenth century. To-day a large merchant or passenger vessel and a comparably sized warship are clearly, from this point of view, of the same genre. They could be, and are, made in the same sort of yards. Many warships are today built on contract in private yards; in Pepys's time there were very few such yards which could build, let alone accommodate for repairs, a third-rate. From the Restoration to the Revolution no man-of-war larger than a third-rate was built outside the Navy's yards at Chatham, Woolwich, Deptford, Portsmouth and Harwich.¹

Table 2. *Places of construction of the Warships built between 1660 and 1688**

Places	Rates and numbers							Totals
	1st	2nd	3rd	4th	5th	6th	Yachts	
Dockyards								
Chatham	4	1	6	2	1	—	4	18
Deptford	2	3	5	1	—	1	1	13
Woolwich	1	3	3	4	1	—	7	19
Portsmouth	3	5	3	1	2	2	3	19
Harwich	—	2	5	—	1	3	—	11
Private Yards								
Thames (Deptford)	—	—	—	—	—	—	—	—
Blackwall, Rotherhithe, etc.)	—	—	8	2	—	1	7	18
Bristol	—	—	2	2	—	—	—	4
Forest of Dean	—	—	—	1	—	—	—	1
Conpill	—	—	—	1	—	—	—	1
Woodbridge	—	—	—	1	—	—	—	1
Yarmouth	—	—	—	—	2	—	—	2
Totals	10	14	32	15	7	7	22	107

* *Cat. Pepys MSS.* 1, 224. Cf. the similar story told by the more detailed information given in Pepys 'Register of Ships' in *Cat. Pepys MSS.* 1, 266-84. Of the eight third-rates built on the Thames, five were products of Henry Johnson's yards at Blackwall and three were built by William Castle at Deptford.

The tonnage of the majority of English ships plying in European trade varied between 50 and 100 tons. The ordinary coasting hoy might be anything from 4 to 80 tons; the coal trade between London and Newcastle called into being some larger vessels ranging from 300 to 400 tons (see *infra* IV). A sample of fifteen London vessels bound for the West Indies, North America, Spain and Portugal, the Canaries and Madeiras and which took aboard further cargo at, or off, Dover in 1633 shows an average tonnage of 178 and a range of from 100 to 250;² other evidence suggests that such figures are not unrepresentative of the general run of ships in the

¹ See Table 2; for post-Revolution developments, see *infra* IV.

² Exch. K.R. Port Books, 190/661/13.

longer distance commerce.¹ Only in the African, American and Indian trades were there to be found a few English-built ships that began to compare in size with the larger men-of-war; by 1700 a handful of East Indiamen approached this position. By contrast the thirty ships of the naval building programme of 1677, for instance, were: one first-rate of 1,500 tons, two second-rates of 1,300 tons each and twenty third-rates of 1,000 tons apiece.²

As might be expected only at London and Bristol were there private yards which could readily be put to the Navy's assistance for ships as big as a third-rate. Probably the largest of these were Henry Johnson's yards on the Thames at Blackwall and those of Castle at Deptford. In the century after the Restoration, with the continuing growth of the English merchant marine, these yards and others nearby underwent a major expansion and came in time to rival the naval yards in size and importance.³

Along with size went cost. An 80-ton hoy cost about £340 in the 1660's. At the same time, estimates by Christopher Pett for a second- and a third-rate were £9,176 and £6,844 respectively.⁴ In the following decade, a contract price for a third-rate was £9,000.⁵ Such figures, moreover, exclude the costs of rigging, stores and guns. A 600-ton warship was said by Pepys to cost £4,800 'off the stocks' and £13,000 'set to sea'.⁶

¹ See V. Barbour, 'Dutch and English Merchant Shipping in the Seventeenth Century', *Econ. Hist. Rev.* II (1930), 262-3; Albion, *op. cit.*; and L. A. Harper, *The English Navigation Laws* (Columbia, 1939), esp. chap. xxii.

Average figures of tonnage are apt to be confusing owing to the variations as between different types and areas of trade, to the presence of a small number of large vessels registered at London and a large number of small vessels registered both at the outports and at London, and to the wide ranges concealed by arithmetical averages.

Thus a 1702 survey said to cover the whole of England gives an average figure of 76 tons, but the variations of the same estimate relating separately to London and elsewhere give averages of 150 tons and 62 tons respectively (Harper, *op. cit.* p. 329 and n.) Other samples of English ships entering the port of London, give averages of 112 tons for the years 1692-6, 100 tons for 1699-1701, 93 tons for 1702, and 114 tons for 1719. (Harper, *op. cit.* p. 347.)

Exeter—by no means an insignificant outport—provides an example of what was probably a typical picture of seventeenth- and early eighteenth-century shipping. Out of 145 ships registered there in 1747, the average tonnage was 64, the range was from 12 to 240, and 119 ships, or 82 %, were in the category from 20 to 100 tons. (W. G. Hoskins, *Industry, Trade and People in Exeter, 1688-1800* (Manchester, 1935), pp. 169 and 182-3.)

² *Cat. Pepys MSS.* I, 236. It should be noted, however, that the calculation of ships' tonnage at this time was by no means reliable or consistent. Moreover, the distinction between tons burthen, displacement tonnage and carrying capacity is not always clear. Nevertheless, the magnitude of the discrepancies is not so great as seriously to modify the very real differences in size between men-of-war and merchant ships in general.

Some idea of the variations may be gathered from the fact that the seventeenth-century first-rate *Royal Sovereign* was diversely described as of 1,631, 1,556 and 1,441 tons; a fifth-rate of 326 tons was estimated in 1684 to have a carrying capacity of 214 tons; a merchant ship launched in 1704 and calculated by its builder to be of 141 tons was described in its papers variously as 167 or 170 tons. See, on these points: J. Charnock, *History of Marine Architecture* (1901), II, 483, 488; *Notes and Queries* (1927), vol. 152, p. 327; vol. 153, pp. 304, 340, 406; R. C. Temple (ed.), *The Papers of Thomas Bouwrey* (Hakluyt Soc., 2nd ser. (1925), LVIII, 125).

³ Barbour, *op. cit.* p. 263; Albion, *op. cit.* p. 88; Defoe, *op. cit.* I, 346-8.

⁴ *State Papers, Domestic*, Charles II, vol. 93, no. 27 and vol. 105, nos. 143 and 145.

⁵ Albion, *op. cit.* p. 93.

⁶ *Cat. Pepys MSS.* I, 229. See comparable figures quoted in Ehrman, *op. cit.* p. 36. As he very pertinently remarks, 'the ship of the line was larger than the average country house of the day, and her construction far more complicated' (p. 38).

Estimated values put upon the fixed assets of the Kentish yards alone give some impression of their size and of their growth under the stimulus of naval warfare:¹

	1688	1698
	£	£
Chatham	44,940	56,059
Deptford	15,760	28,641
Woolwich	9,669	15,801
Sheerness	5,393	6,960
	£75,762	£107,461

These figures may serve to emphasize the extent to which the Stuart Navy posed a need for large-scale establishments and heavy capital expenditure such as was demanded by few forms of private enterprise in that age. Only in land and property owning as practised by the wealthiest classes and in a very few industries such as coal-mining, iron-smelting and founding, or alum manufacture were fixed capital assets on this scale to be found. The contrast is further sharpened by the fact that shipbuilding is mainly an assembly process and that consequently (repair work apart) the value of the working or circulating capital was also on a like substantial scale.

II

The economic influence of the dockyards may be considered as operating through three main channels: through the employment of direct labour services, through the demand for a wide range of goods and indirect labour services, and through town-building, the yards forming the nucleus and dominating element in the communities which grew up about them.² It will be convenient to deal with the first and third of these together.

During the disturbed years of the later Stuart reigns, the numbers employed in the yards rose strikingly, as the accompanying graph shows. Low though the January 1687 total of 1,185 seems by comparison with the 5,195 of March 1703, it may be contrasted with the figure of 980 to which total it was ordered that the numbers of workmen in all yards should be limited in 1654. In a half-century, then, the working force of the naval dockyards had risen over five-fold. The second Dutch war saw the movement under way: 238 were at work at Deptford in 1663, 302 at Woolwich in the following year; 1665 saw 800 busy at Chatham. Such figures are dwarfed by the 3,275 working in the Kentish yards alone in March 1704; by 1712, whilst the Treaty of Utrecht was being negotiated, these same yards still had over 2,500 at work.³

¹ *V.C.H. Kent*, II, 355, 362. The relative growth over the whole period of the Portsmouth and Plymouth yards was, of course, far more spectacular. The provision of facilities for maintenance and major repair made the greatest demands, both in physical assets and in organization. See Ehrman, *op. cit.* pp. 80-1. The pressure of naval expansion brought into being a proposal in 1670 that new yards should be built at Erith and Greenhithe, covering some 24 acres and including two double dry docks, a wet dock, storehouses, etc., the cost of which was estimated at £63,000. The proposal was unfruitful.

² These three channels are not claimed as exhaustive. Just as it is not possible here to consider the administration of the yards, so the financial problems posed by them are ignored.

³ *V.C.H. Kent*, II, 367. See also *S.P. Dom.* Charles II, vol. 77, no. 68; vol. 449, no. 8; vol. 99, no. 125; vol. 106, no. 25; vol. 129, no. 69; vol. 191, no. 83; *Cat. Pepys MSS.* I, 69.

Thus in all the dockyard centres, and especially at Portsmouth and in the Medway towns, there is a clear picture of substantial concentrations of workers, labouring under conditions very different from those surrounding the 'domestic system'. To all the aspects of shipbuilding and repair there

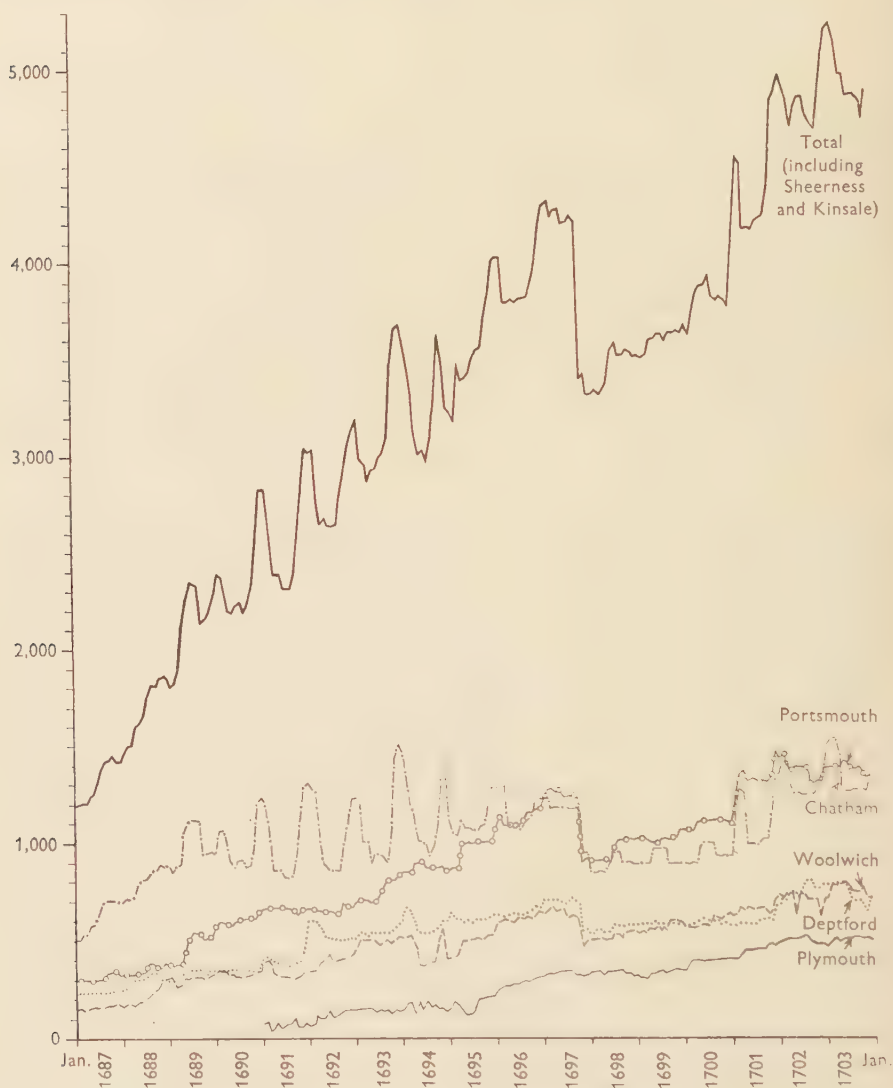


Fig. 1. Numbers of Workmen employed at Naval Dockyards, 1687-1703.

was added constructional work on the yards themselves, calling for the employment of the bricklayer or the house-carpenter or the plumber. So the totals cover a wide range of jobs: shipwrights and labourers normally constituting the largest single groups, followed by caulkers, joiners and carpenters, though the precise composition varied with different yards and different times. The total of 800 at Chatham in August 1665 includes, for

instance, 440 shipwrights, 129 labourers, 47 house-carpenters, 41 joiners, 31 caulkers, 23 scavelmen, 18 bricklayers, 17 'ocam boyes', 15 boat-makers, and a scatter of plumbers and pump-makers, coopers and pitch-heaters.¹ Some idea of the scale of building—and this in modest terms compared with the big expansion carried out by William²—may be obtained from the construction work of the period April 1686 to October 1688. During that time, twelve storehouses were built at Deptford, one at Woolwich, twenty-one at Chatham, twenty at Portsmouth as well as docks, dwelling-houses, mast-houses, boat-houses and so on to a total value of £32,000.³

The population of these dockyard towns was undoubtedly growing rapidly. Estimates based on the Hearth Tax Returns for 1664 suggest that at that time Deptford may have had a population of about 4,500 and Woolwich 2,500. The figure of some 1,800 for Chatham must be taken in conjunction with 2,400 for Rochester and 750 for Strood as the growth and close proximity of these towns had already created virtually a single urban area.⁴ In 1686 it was claimed that Chatham's population had trebled in forty years.⁵ The local J.P.'s reported, in 1702, that the Hundred of Blackheath (in which lay both Deptford and Woolwich) had experienced 'great Augmentation of building and Increase of Inhabitants'.⁶ In 1711 the inhabitants of Woolwich itself were said to be 'chiefly compos'd of Workmen and others employed in Her Majesty's Dockyard, Ropeyard and Ordnance Service'.⁷ Contemporaries were agreed in ascribing such increases largely to the dockyards and commented upon the intimate association of the towns with the Navy.⁸

It would, then, seem reasonable to suggest that during this period a large and increasing proportion of the families living in the dockyard towns were dependent upon direct dockyard labour. In so far as work was thus provided, the demand for labour may have tended to raise the general level of prosperity of those towns, just as did the demand for goods and services. Similar developments were taking place at Portsmouth, though rather later in their full incidence (cf. Fig. 1). Defoe, indeed, speaks of that town as having been made prosperous by the presence of the Navy and so influenced by it that 'the inhabitants of Portsmouth are quite another sort of people than they were a few years before the Revolution'.⁹ Some classes of these communities may well have enjoyed a consistent and

¹ *S.P. Dom.* Charles II, vol. 129, no. 69.

² For some details of this, see Ehrman, *op. cit.* pp. 413–29.

³ *Cat. Pepys MSS.* 1, 95.

⁴ Details of this and of the population estimates will be found in the author's unpublished Ph.D. Thesis (Univ. of London, 1951), *The Economy of Kent under the Later Stuarts*, ch. 1 and app. 1.

⁵ Kent County Archives: Quarter Sessions Order Books—Maidstone April 1686. It should, however, be added that as this estimate was included in a petition to the Lord Chancellor designed to secure financial assistance in rebuilding the church, said to be too small, it probably owed more to optimism than to accuracy.

⁶ *Ibid.* Order Books—Maidstone, April 1702.

⁷ *Ibid.* Session Paper 1711, bundle 140.

⁸ See, for example, *H.M.C., Portland MSS.* II, 277; Philipott, *op. cit.* pp. 104–5; D. Lysons, *Environs of London* (1791; 2nd ed. 1811), p. 458.

⁹ Defoe, *op. cit.* 1, 138.

continuing benefit, especially those providing goods and services always in some measure of demand. Some reflection of this is provided in the occupations of those freeholders qualified to serve on juries: in Chatham in 1696, for example, out of a total of fifty so qualified, the accommodating title of 'gent' accounted for nineteen—and amongst these were several persons connected with the dockyards—whilst thirteen were shipwrights.¹ For many of the dockyard workers, however, benefits were not always so evident. Periods of vigorous, inflated employment, preceded by the furious recruitment of civilian labour by methods which included impressment, alternated with intervals of depressed conditions, during which labour was laid off, ships rotted and poverty was more noticeable than usual in a region with no other comparable source of employment. It is not, then, surprising to find that, in Kent at least, the dockyard towns show many symptoms of enjoying a generally higher prosperity than other areas of the county, both rural and urban, and yet at the same time are the subject of periodic complaints of excessive poverty. Thus Chatham complains of the great charge of its poor relief;² at Woolwich the cost of the poor has risen along with the growth of numbers;³ from Deptford comes that familiar pair of social groans: the parish cannot maintain its own poor, its landowners are 'unreasonably overrated and taxed'.⁴

Fortunately, perhaps, for the inhabitants of these areas they were kept fairly busy by the persistent warfare of the years from the restoration of the Stuarts to the arrival of the Hanoverians. But, as Fig. 1 indicates, such employment proceeded with great irregularity, both in the longer run with the alternation of peace and war and in the short run with seasonal variations.⁵ The reality of the fluctuations in the shipbuilding programmes can also be seen—for the pre-Revolution period—from Table 3. Although, of course, this takes no account of the demands of repair and maintenance, it is clear from the records pertaining to the yards that large dismissals of labour did in fact alternate with vigorous engagement. Thus, for instance, letters such as that from Commissioner Pett to Pepys in April 1664, stating that more workmen must be employed spinning hemp at Chatham and urging that they 'should work a day and a half each day', must be set against another letter received by Pepys, in March 1668, announcing that Sir William Coventry was 'well persuaded of the success of his project of wholly paying off a good part of the men belonging to the Deptford yard'.⁶ Reductions in establishment after the third Dutch war provided for the

¹ K.C.A. Freeholders Lists.

² *Ibid.* Quarter Sessions Order Books—Maidstone, April 1686.

³ *Ibid.* Sessions Papers 1711, bundle 140.

⁴ *Ibid.* Quarter Sessions Order Books—Maidstone, October 1681, July 1689, October 1690, April 1691.

An indication of the employment opportunities and of the scope for increased prosperity in such urban areas as these is provided by the fact that although Deptford was one of a number of Kentish parishes complaining of being unable to meet the cost of poor relief at this time, the majority of such complaints came from rural parishes in East Kent or those in the economically declining city of Canterbury.

⁵ See Ehrman, *op. cit.* pp. 89–91 for the background to these seasonal variations and further details of employment and its fluctuations.

⁶ *S.P. Dom.* Charles II, vol. 97, no. 17; vol. 236, no. 56.

intended discharge of 1,616 men from the four main yards, retaining only 425 men in pay.¹ In June 1712, 400 men were dismissed from Deptford and Woolwich in view of approaching peace.²

Table 3. *Naval Shipbuilding, 1660-88**

Year	1st and 2nd rates	3rd rates	4th and 5th rates	Yachts and 6th rates	Total numbers	Approx. total tonnage completed each year
1660	—	—	1	—	1	500
1661	—	—	—	2	2	200
1662	—	—	—	2	2	200
1663	1	—	1	1	3	2,000
1664	2	—	—	—	2	2,000
1665	1	—	1	1	3	1,500
1666	1	4	5	4	14	7,600
1667	1	2	1	—	4	3,900
1668	—	1	1	—	2	1,300
1669	1	—	—	—	1	1,100
1670	3	—	—	2	5	4,400
1671	1	—	1	2	4	1,900
1672	—	—	1	—	1	100
1673	1	1	—	4	6	2,800
1674	—	2	2	2	6	3,000
1675	1	2	3	2	8	4,900
1676	—	—	2	—	2	1,000
1677	—	—	—	2	2	200
1678	2	6	—	—	8	8,200
1679	2	12	—	1	15	14,300
1680	1	2	—	1	4	3,200
1681	—	—	—	—	—	—
1682	3	—	—	1	4	3,700
1683	1	—	—	1	2	1,200
1684	—	—	—	—	—	—
1685	2	—	—	—	2	2,500
1686	—	—	—	—	—	—
1687	—	—	4	—	4	2,000
1688	—	—	—	—	—	—

* Based on the table in *Cat. Pepys MSS.* 1, 222. Approximation for tonnages; 1st rate, 1,400; 2nd rate, 1,100; 3rd rate, 1000; 4th rate, 500; 5th rate, 300; 6th rate, and yacht, 100. The dates signify completion of building.

Comparison of the wages paid at the dockyards with those prevailing elsewhere is not easy. Apart from the relatively small permanent salaried staff, wages seem normally to have been based on daily time rates, a procedure by no means invariable at the time. Rates of wages given in the Quarter Sessions Assessments are in some instances lower than those paid in the naval yards: carpenters, assessed in 1669 at 1s. 8d. per day, in summer, were receiving 1s. 10d. per day at Chatham in the summer of 1661; plumbers were being paid 2s. 6d. per day in the Deptford yard at

¹ *V.C.H. Kent*, II, 356.

² *Ibid.* p. 367.

the same time, whilst the comparable assessment stands at 1s. 8d. Differences in the pay of labourers and shipwrights show only very slight margins. In any event, it is certain that for many civilian employments in many areas, wages actually paid exceeded assessed wages, so that, in fact, differences between dockyard and other rates may have been of trifling account.¹

The whole subject of employment at the dockyards at this time was, however, complicated by the chronic financial want of the government, resulting in the total failure of the naval authorities to pay wages with any sort of regularity. This aggravated the vigour of fluctuations in work, helped to keep labour in a constant ferment, at once assisted in forging links of local credit relationships and strained them to the uttermost. When they reached an advanced state of tension further severe difficulties were encountered in securing labour and resort was again had to impressment.

It is not proposed to dwell for long upon the distress caused by this failure of naval credit.² It will suffice to note some of the main features of a situation which lasted throughout the period, though probably reaching its worst during the years of Charles II's reign. Wage payments were in arrears; workmen left to seek jobs elsewhere, presented petitions complaining of poverty and starvation and begging for payment. In November 1662 nearly £16,000 was due for wages at Chatham from July 1661 to September 1662.³ When the 400 men were dismissed in 1712, wages were once again 15 months in arrears.⁴ In June 1668 Sir William Coventry wrote to Pepys to inform him that £10,000 to £12,000 would be available to pay off men in the yards, some of whom were by then a years' wages in arrears. Coventry added that it would have two desirable effects. Those remote from their homes (labour was sometimes impressed and then dispatched post haste from one yard to another) and who made the greatest clamour and had the most hardship in finding credit would be paid off. Secondly—and this gives a clear indication of the conscious domination of the area by the dockyards—those 'who are inhabitants will be afraid of being discharged whilst hoping for the money, because then they must go from home to seek work and perhaps not find it'. Aware of its limitations because of other employment available in the London area he added that, 'in Deptford and Woolwich this method will not have the same force, because the river Thames will be their home to furnish them work'.⁵

¹ K.C.A. Wage Assessments by Quarter Sessions. That for 1669 is the closest surviving to the 1661 figures of dockyard wages; a 1661 assessment is unlikely to have shown higher rates, as the general tendency shown by later assessments was for wages to move slightly upwards.

The dockyard rates are in *S.P. Dom.* Charles II, vol. 46, nos. 38 and 39. See also H. M. Richardson, 'The Wages of Shipwrights in H.M. Dockyards, 1496-1788', *The Mariner's Mirror* (1947), p. 265. For further details of wages and employment conditions, see Ehrman, *op. cit.* pp. 91-108.

² For some details of this and of the financial problems involved, see Tanner, *Samuel Pepys and the Royal Navy*, pp. 37-56, and *V.C.H. Kent*, II, 336-88.

³ *Cal. S.P. Dom.* 1661-1662, pp. 234 and 554.

⁴ *V.C.H. Kent*, II, 367.

⁵ *Cal. S.P. Dom.* 1667-8, p. 463.

One of the effects of these economic and social conditions was to breed ill-organized combinations of labour. Men demanded higher wages as well as the payment of existing sums due: victuals were dear and credit not indefinitely elastic. The impressed men suffered most. The ropemakers petitioned as a body calling themselves the Company of Ropemakers and representing impressed men distant from their homes and allegedly in receipt of 'board wages'. In November 1665 they were six weeks in arrears: in March 1666 a further petition claimed that their board wages were then seventeen weeks in arrears; in June 1666 it had grown to nine months, credit at Chatham was drying up and the Clerk of the Ropemakers added to the petition that he did not believe they would be able 'long to subsist to doe his Ma:^{ties} service without money to pay for necessary provisions'.¹ Between 1663 and 1665 discontent broke into strikes and mutinies; similar developments occurred in 1668 when shipwrights from Chatham presented themselves in a body at the Treasury.² Later in the century the significance of such events was stressed by Sir Edward Gregory, Commissioner at Chatham in 1693, who lectured the Navy Board upon the political consequences likely to follow delay in paying the dockyard workers, there being plenty of agents ready to excite discontent.³

In these various ways, then, the Stuart dockyard towns were coming to possess some of the characteristics of what are today called Special or Development Areas and were once Depressed Areas. For obvious reasons, this analogy must not be pushed too far; but it may serve to put into economic and historical perspective the appearance of certain well-known features of industrial concentration.

III

Some idea may be obtained of the volume and range of demand for goods from the warrants for receipt of goods into stores according to contract, a reasonably complete series of which cover the period from February 1664 to December 1667.⁴ The goods may be divided into nine main groups, the major constituents of which are indicated below:

1. *Timber and miscellaneous wood products.* English and imported hardwoods; Baltic deals; masts, spars, laths, barlings, etc; oars and barrels; handspikes, blocks; spiles and tree nails; boats, pinnaces, yawls, etc.

2. *Textiles.* French and East Anglian Canvas; Holland duck and other linen; bewpers (bunting).

3. *Miscellaneous Naval Stores.* Hemp, cordage, cables, oakum, pitch and tar, train oil; rosin; brimstone.

4. *Ironwork.* Anchors, grapnels, nails.

5. *Armaments.* Cannon and shot.

¹ *S.P. Dom.* Charles II, vol. 136, no. 121 (1665); vol. 151, nos. 34 and 110 (March 1666); vol. 160, no. 95 (June 1666).

² *Cal. S.P. Dom.* Charles II, 1667-8, p. 456.

³ *V.C.H. Kent*, II, 363.

⁴ *Cal. S.P. Dom.* Charles II, 1664-5, p. 133; 1665-6, p. 131; 1666-7, p. 391; Addenda, 1660-85, p. 431.

6. *Leather and other animal products.* Hides and backs; ox and goat hair; leather scuppers and buckets; tallow.
7. *Wood fuel.* Broom, reed, faggots; charcoal.
8. *Building materials.* Bricks, tiles, lime and sand.
9. *Miscellaneous.* Ensigns and jacks, hammocks; brooms and brushes; candles and lanterns, etc., etc.

It is not possible to show total quantities and values of these because of the existence of imprecisely specified amounts and because of inadequate information on prices. As some indication of the scale of purchase, however, it may be mentioned that the value of timber and wood products supplied during that period probably exceeded £200,000 and included nearly 16,000 loads of hardwood timber; the value of textiles taken into store was about £30,000. Although these years were largely occupied by war, subsequent expansion and the later conflicts in all probability gave rise to much greater figures, thus suggesting that the picture offered may be not unrepresentative of the age.

Many of these goods were imported from overseas. All the masts and deals, as well as much of the plank and spars fall into this category and the trade in these commodities loomed large in the commercial relations between England, the Baltic countries and New England.¹ So, too, did the other main imported group of naval stores—pitch, tar, hemp, cordage; these also came primarily from the Baltic and Scandinavian countries. Textiles and iron also figured directly and indirectly amongst the imports: many naval requirements were made in England from Spanish and Swedish iron;² foreign canvas continued for many years to be the main material of English sails.³ These and other imported raw materials entered into all the major processes carried on in the yards. Without hemp from the Baltic the ropeyards could come to a standstill; a lack of deals or masts could slow down vital repair or building programmes.⁴ On the effects of this upon international commercial and political relations it is not possible to dwell here.⁵

Amongst the home-produced goods which flowed into the dockyards, the outstanding items which alone gave weight to the English contribution to its own naval construction, were hardwood timber and guns. Most—but certainly not all—of the oak, elm and similar woods still came from English forests, though their dwindling strength was the subject of much contemporary comment.⁶ Armaments were entirely produced by the English industry; East Anglia provided its modest quota of sailcloth. Local resources were responsible, too, for the miscellaneous building materials, wood fuel, leather and animal products, as well as much that appeared under the miscellaneous category. In the form in which these items were supplied is reflected both the stimulus to local industry and

¹ Albion, *op. cit. passim*.

² See, for instance, *Cal. S.P. Dom.* Charles II, 1670, pp. 64-5.

³ Barbour, *op. cit.* pp. 269-70.

⁴ See, for example, *Cal. S.P. Dom.* 1665-6, p. 304; 1666-7, p. 209; 1670, pp. 347-8.

⁵ Cf. Albion, *op. cit.* and A. T. Mahan, *The Influence of Sea Power upon History* (Boston, 1918).

⁶ Albion, *op. cit.* chap. III.

trade and the processes of the dockyards. Such commodities as handspikes and oars were sometimes bought in, as were blocks and barrels; small boats and pinnaces were regularly obtained from local shipwrights. Practice varied, however, no doubt with the differing pressures of peace or war, stagnation or reconstruction, and it is not easy to draw a line: though barrels and blocks were bought, blockmakers and coopers appear amongst those employed at Chatham in 1663 and 1665; local shipwrights supplied both Chatham and Deptford with such craft as 'boats, yawls and pinnaces', but nevertheless fifteen boatmakers were employed at Chatham in 1665. Ironwork seems to have been entirely drawn from outside—the Foleys being main suppliers of nails. Local anchorsmiths supplied the yards as required, and sometimes suffered thereby.¹ The presence of sailmakers at Chatham and Woolwich suggests that the sailcloth bought from the textile areas was made up into sails at the yards.

As specific examples of purchases, during the 1664–7 period, which doubtless had their due reaction upon local producers, carriers and dealers, there may be noted the 208,000 bricks and tiles bought from Kentish makers, the 3,600 leather scuppers and buckets, or the 451,650 sheaves of broom, reed and faggots. But it is to the timber trade and the armaments industry that we must turn for our main examples of the influence of dockyard demand.

The numbers of guns carried by men-of-war varied from peace to war and as between home and foreign seat, but approximate maxima and minima for this period were: first-rate, 80–100; second rate, 54–84; third-rate, 52–72; fourth-rate, 36–54; fifth-rate, 26–32; sixth-rate, 10–18.² Thus, simply for the 107 ships built from 1660 to 1688, the total of guns needed, without allowing for spares or replacements, would have been approximately 5,600. Of these, 2,310 (or 4,101·2 tons of guns, as they were then measured) went to the 30 ships of the 1677 programme.³

This armament was bought from the gunfounders of the Kent and Sussex Weald and indeed it was probably only the Ordnance authorities' continued purchases from this source that kept in being the iron industry in that area. As the Midlands grew to importance in iron manufacture from the seventeenth century onwards, so the Wealden industry declined, gunfounding remaining its main support, and the long years of peace after 1713 did much to sap that final buttress.⁴ Meanwhile, members of the Browne family continued to thrive on Ordnance demands under the later Stuarts as under the early Stuarts.⁵

'Fear not undoeing', wrote George Browne—holder of the office of Gunfounder to the King—to his partner Alexander Courthope in December

¹ See, for instance, the letter from John Ruffhead, anchorsmith, to Pepys in *Cal. S.P. Dom.* Charles II, 1672, v, p. 72. Ironwork, e.g. nails, often came from domestic producers, as letter from Foley in *Cal. S.P. Dom.* Charles II, 1661–2, p. 149, as did also sailcloth. These straightforward examples of a large organization buying supplies from small producers are used by Professor Nef in *War and Human Progress*, pp. 84–5, to minimize the extent of concentration represented by the dockyards; he observes that the 'production of naval supplies... was not centralized'.

² *Cal. Pepys MSS.* I, 233–4.

³ *Ibid.* pp. 233–6.

⁴ E. Straker, *Wealden Iron* (1931), *passim*.

⁵ *Ibid.*

1664, during the urgency of rearmament for the second Dutch war, 'we have noe cause to complayne, which you will be satisfied in when your accounts are made up.' In January 1664/5 Courthope and Browne contracted to supply 1,500 iron guns. This represents 2,552 tons of guns, a total cost of £43,198. Many of these guns went, no doubt, to meet the Navy's requirements. Certainly, the Brownes played this role in the programme of 1677. By that time another John Browne was the current member of that dynasty and he received a share of a contract to supply the ordnance for fifteen of the new ships, his proportion amounting to 740 guns, totalling 1,310.6 tons.¹ Though naval demand provided a most profitable outlet for such enterprises it was attended with its customary risks. In 1681 Mary Browne, 'relict of John Browne, his Majesty's Late Gunfounder' was petitioning the Crown for moneys due, to the amount of some £27,000.²

Timber contracting and the gradual evolution of timber monopoly have been traced by Professor Albion, who has shown how earlier methods were superseded with the appearance of a 'class of middlemen or timber brokers whose agents replaced the royal purveyors in treating for the small lots of timber'.³ In the importing branch of the business, the big dealer early flourished and it will perhaps suffice to remind readers of the relations between Samuel Pepys and Sir William Warren. The latter was not, however, alone in the field of major operators: such men as William Wood and Peter Blackborrow (or Blackbury, as he appears in the *Diary*) were also dealing in both home and imported timber on a large scale, and the big yards which grew up on Thames-side during this period served both the dockyards, especially those at Deptford and Woolwich, and the rising private shipbuilding enterprises. Chatham, however, and probably also Portsmouth, tended to rely for its hardwoods on the English timber and local dealers. Both were well situated in this respect with accessible hinterlands stocked with oak and elm.⁴ In this local supply, as in the imported trade, the development of the timber merchant can be similarly traced and the relations of one of these—John Mason of Maidstone—with the naval authorities may serve to illustrate this aspect of dockyard influence.

Kent supplied an important proportion of the timber used in the Chatham yard. In the period February 1664–December 1667, the total quantities which, so far as can be ascertained, came from that county are shown in Table 4.

By way of comparison with other counties and as an indication of the sources upon which the different yards relied—at any rate in this early Restoration period—this total may be set against the 6,050 loads from

¹ The references to the activities of Courthope and Browne are derived from MSS. in the possession of Lord Courthope of Whiligh, for whose permission I am much indebted. See *The Economy of Kent under the Late Stuarts*, pp. 173–85 and app. 4.

² *S.P. Dom.* Charles II, Entry Book 67, p. 21.

³ Albion, *op. cit.* p. 57.

⁴ For Chatham, the Medway was the vital route from the Weald of Kent and Sussex, and the trade therefrom in both naval timber and ordnance was an important stimulus to improvements in the navigability of the river.

the three royal forests of Aliceholt, Whittlewood and Waltham sent to Deptford and Woolwich between December 1663 and September 1668.¹ Supply on this scale was propitious to the rise of middlemen and although many landowners are to be found amongst those tendering to the Navy, the professional timber merchant is clearly emerging. In such conditions 'carpenters' grew into 'timber merchants' and some aspired, in the documents of the time, to the dignity of 'gent.'

Table 4. *Intake of Timber from Kent, 1664-6**

Goods	Destination	Total quantities
Oak	Chatham	2,810 loads
Elm	Woolwich	80 "
Elm	Chatham	854 "
Oak and elm	"	1,891 "
Beech, ash, hornbeam, elm, oak	"	149 "
Compass and knee timber	"	450 "
Miscellaneous and unspecified	"	300 "
Total	—	6,534 "

* *S.P. Dom.* Charles II: vol. 108, nos. 236, 238, 259, 260, 284, 291, 307; vol. 141, nos. 55, 56, 59, 87, 90, 97, 128, 139, 145, 150, 153, 156, 160, 161, 227, 228; vol. 185, nos. 57, 60, 80, 81, 84, 88. *S.P. Supplementary*, vol. 137, no. 802. For the nature of 'compass and knee timber' see Albion, *op. cit.* ch. 1.

Mason—'Mr Mason of Maidstone' to the Navy Commissioners and one of the select company suspected of offering bribes to the not altogether incorruptible Pepys²—was one of several shipwrights, carpenters, mariners who acted as intermediaries. Indeed, almost anyone who could lay his hands on a piece of timber tendered it to the Navy. Of the 6,534 loads noted above, however, Mason alone sold 2,176 loads, followed by Robert Moorcock, a Chatham shipwright, with 1,890 loads, these two also supplying a joint contract of 240 loads.³ Subsequently Mason became the main supplier of English timber to the Chatham yard and a potential monopolist.

After 1666, the relations between Mason and the dockyard authorities grew increasingly strained. On the one side were clear attempts to corner the market in English hardwood suitable for use at the dockyard, on the other was the government's failure to pay its debts. The latter was a factor relevant to the supply of all stores just as to the supply of labour, and its effects may be illustrated from the manner in which it affected Mason.

¹ *S.P. Dom.* Charles II, vol. 257, no. 115.

² *Diary*, Feb. 24, 1688 and Aug. 19, 1668. On the former occasion Pepys was told of an accusation likely to be made that he had received £50 from Mason and remarked characteristically that, so far as he recollected, it was untrue but that he was troubled to have his name mentioned in the business 'and more to consider how I may be liable to be accused where I have indeed taken presents'. The second instance involved Will Hewer.

³ Although Robert and John Moorcock continued to supply timber, John Moorcock was subsequently involved with Phineas Pett, the shipwright, in a disreputable affair in which the latter was found to be selling timber to the dockyards in contravention of the rule by which the King's Officers were prohibited from so doing. *Cal. S.P. Dom.* Charles II, 1667-8, pp. 450, 501 and 607. See also Pepys's *Diary*, July 24, 1668.

In July 1668, for example, he made a tender of 555 loads of urgently needed timber, but demanded up to 60s. per load for it, with £500 in hand and ready money on delivery of every consignment.¹ After an unsuccessful effort to persuade Mason to lower his rates or to go to London to deal direct with the Navy Commissioners, Sir John Mennes had to report that Mason was 'so far from coming up to London about the same that he is indifferent whether you bargain with him or not which makes me to judge hee is grown either very rich or hath many customers for the same'.² In the following years substantial contracts were signed for his timber but relations worsened. Mason demanded payment of his past bills and at the same time tried to force on the dockyards very large amounts of timber of all sorts along with their immediate requirements. Attempts, some successful and some not, to corner the market and raise prices alternated with grudging but necessary purchases of his timber. Not unnaturally, Mason's character and business habits periodically came under attack in the correspondence between the Commissioners at Chatham and the Navy Board.³

The arguments, the tactics, the sales, continued until Mason's death in 1679, though meanwhile he was much concerned with obtaining payment of his bills, ten letters of his on this subject appearing amongst the State Papers between 1668 and 1673.⁴ In these letters—mostly blunt and ill-written—Mason often combined begging or demanding payment ('mony I want and mony I must Raise with my timber: and as for being paid in course I understand it not') with offers of more timber. In May 1671, for instance, along with a chiding for broken promises and an expressed fear of arrest for debt went an offer of 800 loads.⁵ The general run of his actions suggests an eagerness to sell to the Navy—at his price. This in turn implied not only that naval contracts were profitable but that to an appreciable extent he was dependent upon them to make the scale of his buying worth while; for he bought up timber extensively in mid-Kent and the Wealden area, Navy purveyors sometimes journeying to inspect the trees *in situ*, or on other occasions simply visiting his wharf and yard at Maidstone. It may then be suggested that in spite of increasing private uses for timber—shipbuilding amongst others—it was only the addition of large naval orders that brought into being local timber middlemen on this scale. Moreover, it is clear from Mason's and Warren's experiences alike that the periods in which substantial sums were owing to them by the authorities were amply balanced by the margin of profits contained in the payment when it arrived.⁶

¹ *S.P. Dom.* Charles II, vol. 242, no. 47.

² *Ibid.* vol. 242, nos. 147 and 204.

³ See, for instance, *Cal. S.P. Dom.* Charles II, 1668–9, pp. 529–30, 531–2, 534, 545, 554, 566, 568; 1670, pp. 398–9 and 460–1.

⁴ *S.P. Dom.* Charles II, vol. 249, no. 148; vol. 255, no. 118; vol. 264, no. 123; vol. 283, no. 88; vol. 286, no. 115; vol. 296, no. 104; vol. 298, nos. 67 and 154; vol. 331, no. 68; vol. 345, no. 155. See also *Cal. Treasury Books*, 1679–80, p. 609.

⁵ *Ibid.* vol. 298, nos. 67 and 154.

⁶ Mason's activities were dwarfed in scale by those of Warren and so proportionately with their debts from the Crown, the former's running into thousands, the latter's into tens of thousands. But both alike prospered in their respective ways. On Warren's claims against the Crown, see H.M.C. *Earl of Lindsey*, pp. 116–54.

For the problems of material supply during William's reign, see Ehrman, *op. cit.* chap. II.

IV

Ships and yards, men, towns and stores—having now considered some aspects of these, the way is clear for a discussion of the naval yards in the context of shipbuilding in general.¹

It is apparent that during the period in question, private shipyards in England were not normally of a capacity equal to the construction of ships of the larger naval tonnages. The very decision of the naval authorities to develop Harwich during the first Dutch war at a time when the dockyards were sorely pressed is indicative of the non-existence of private yards, certainly in the Thames or Medway estuaries, adequate to their needs. Allowed to decay, the Harwich yard was revived on the outbreak of the second Dutch war and in 1666 was launched the first man-of-war built there—a third-rate of 827 tons. Another period of decline followed, interrupted by the programme of 1677 which saw further enlargements and the contribution by Harwich of five of the thirty ships. After this, however, with the changing strategical focus of war the yard gradually fell out of naval employment.² The import of this evidence runs quite contrary to the suggestion made by Professor Nef, who, writing of the later seventeenth century, states that ‘the private yards for building merchant vessels at Harwich and other English east-coast ports were probably as large as those for building warships’.³ By the time of the third Dutch war, only the growing yards on the Thames and those at Bristol, as Table 2 indicated, were capable of building third-rates, though the smaller classes could be entrusted to yards as varied as Yarmouth and the Forest of Dean, Woodbridge and Lambeth.

The continuing pressure of war-demands, however, meant that during William’s wars, as during the Dutch wars, the Navy—spurred by recurrent emergencies—had to turn to the private yards for help in the building programmes.⁴ The dockyards, large as they were, could not shoulder satisfactorily the sudden burdens which the periodic violence of war laid upon them. The government was aware of this as it was aware of the limitations of the private yards. In 1677 Shoreham, for instance, was the subject of a proposition designed to make its harbour and shipyard suitable for the building of a third-rate, ‘his Majesty being very desirous to increase the number of building places’.⁵ A Navy Board letter of May 1693 echoes the customary lament. Dockyard and merchant shipwrights

¹ For generous advice and criticism on the subject of merchant shipping and shipbuilding during this period, I am very grateful to Mr R. Davis of University College, Hull.

² *V.C.H. Essex*, II, 284–6, 292 and 306.

³ Nef, *War and Human Progress*, p. 219. Immediately after this there is quoted the statement by the master attendant at Woolwich in 1671 to the effect that he had known so little to do at the yard that the docks were lent to owners to build or repair merchant ships. This is represented as support for Professor Nef’s general argument; ‘there were’, he says, ‘times when the English Naval Yards had to depend for work upon the progress of the merchant marine’. It would seem more reasonable to represent it as an obvious reaction to a period of temporarily reduced activity in any large-scale enterprise—public or private.

⁴ The points made in this and the next paragraph are amply substantiated, with a wealth of detailed evidence, in Ehrman, *op. cit.* chap. III and pp. 429–39.

⁵ *Cat. Pepys MSS.* I, 54.

alike are exhorted to 'use the best dispatch they can'; the Board 'labours daily under infinite difficulties to procure sufficient men and materials'; amidst the rising prices of shipbuilding timber, it is noted hopefully that 'Mr Winter of Southampton offers to set up a third-rate on that river at the same price as he built the last'. The net is being thrown over a widening area to catch all available shipbuilding resources. Table 5 gives some idea of its range, for a sample of ships under construction in 1693.

Table 5. *Places of construction of 25 Men-of-War in 1693**

Place	Rates			Bomb-vessels
	3rd	4th	5th	
Dockyards				
Deptford	1	—	—	1
Chatham	1	—	—	2
Woolwich	—	—	1	—
Sheerness	—	1	—	—
Harwich	2	—	—	—
Portsmouth	1	1	—	—
Plymouth	—	1	—	—
Private yards				
Thames (Deptford, Rotherhithe, Blackwall, etc.)	—	5	—	1
Bristol	—	1	—	—
Southampton	—	1	—	—
Burseldon	1	—	—	—
Redbridge	—	—	1	—
Hull	1	—	—	—
Shoreham	—	—	2	—

* *Cal. S.P. Dom.* William and Mary, 1693, p. 147. The Thames yards represented were those of Messrs Castle, Shish, Winter and Snellgrove. The exceptional position held by the Thames yards can be gauged by the fact that out of 106 warships (from third- to sixth-rates) built on contract between 1688 and 1709, they were responsible for the following proportions: 16 out of 26 third-rates, 27 out of 34 fourth-rates, 10 out of 27 fifth-rates, and 7 out of 18 sixth-rates. (Dates refer to the contract, not to the launching.) B.M. Add. MSS. 9329, ff. 1-10.

This could be interpreted as suggesting that a growing number of private yards were capable of building such large vessels as third-rates. This might, to some extent, have been so. More probably, however, it reflects the intense pressure put upon the dockyards and the more suitable Thames yards, and the consequent necessity to turn in desperation to yards hitherto regarded as unsuitable for naval purposes. Indeed, some private yards came, for a time at least, to rely largely on naval contracts and some private shipbuilders found themselves in a position having points in common with that of Mason.¹

Since the initial development of the Navy, the building and maintenance requirements of men-of-war had consistently been so much greater than

¹ Ehrman, *op. cit.* p. 436. He quotes three examples in which 'large ships were being built in small *ad hoc* yards relying on naval assistance. Whenever that assistance was not forthcoming, the contractors suffered severely and at once'.

those of the normal run of merchant vessels as to demand large-scale shipbuilding and repairing yards. Ordinary trading ships—save for a very small number of East Indiamen—were not making comparable demands even by the end of the seventeenth century. Naval demands, by contrast, were outstripping the capacity of the Navy's own dockyards. The growth of the merchant marine was real enough, but it had been accomplished without any major qualitative change in the units of production. A quantitative change sufficed. In spite of commercial expansion and in spite of Henry VII's bounty for ships suitable for war service, which by Elizabeth's time settled into a grant of 5*s.* a ton on vessels of 100 tons and upwards,¹ the tonnage of merchant vessels remained, as already shown, obstinately low for most of the seventeenth century. Certainly a few vessels of 400 tons or so were built in the late sixteenth or early seventeenth centuries, particularly in the East Anglian ports, some of which had their heyday of importance in civil shipbuilding during this age. Ipswich and Woodbridge, drawing on the timber of the hinterland, became for a time the shipyards of London and built some vessels of 300–400 tons.² According to Defoe one of the main customers of the Ipswich yards was the London-Newcastle coal trade—a branch of commerce using larger ships than was usual for the time, and much used by Professor Nef as indirect support for the existence of large-scale capitalist shipyards.³ Yet the evidence for any appreciable number of the larger vessels—bulky, 300–500-ton colliers specially evolved for the carriage of heavy cargoes—is slender indeed. The average size of a cargo of coal imported into London increased thus:

1592	...	...	...	56 tons
1606	...	...	...	73 tons
1615	...	...	...	83 tons
1638	...	...	...	139 tons
1701	...	...	...	248 tons

By 1731 the average shipment of coal from Newcastle had reached 312 tons.⁴ Though the weight of a cargo was not the same as the tonnage of a ship, the inference from these figures would seem to be that even in the London trade, it was not until the end of the seventeenth century that the larger vessels became sufficiently numerous to affect the average tonnage.⁵

If, then, it is conceded that both in the coastal trade, including its coal branch, as well as in overseas commerce, the opportunities for large-scale shipbuilding, as reflected in the size of ships, were small before the later

¹ *V.C.H. Essex*, II, 274.

² *V.C.H. Suffolk*, II, 217–18. The largest vessel, for instance, in a list of 380 ships covering the years 1625–38, was a 400-ton ship launched at Woodbridge. From about this time, however, this region declined in importance as a shipbuilding centre.

³ Defoe, *op. cit.* I, 42–3. Nef, *The Rise of the British Coal Industry* (1932), I, 174, 390–2; and *War and Human Progress*, p. 87.

⁴ Nef, *British Coal Industry*, I, 39.

⁵ Very much smaller average tonnages were found in the coal trade—other than between Newcastle and London—and in the coastal trade as a whole. See Willan, *op. cit.* ch. II, and Nef, *British Coal Industry*, I, 392 and n.

years of the seventeenth century, then the indirect evidence for this particular pillar of Professor Nef's 'industrial revolution' has vanished and the pillar itself crumbled away. For no direct evidence has apparently yet been brought to light.¹ Nor is there any reason to suppose that the construction of the normal merchant ships of the age needed any very large resources of capital and certainly nothing on the scale of the naval dockyards. Elaborate and costly equipment is not required to build vessels of the normal tonnage of that age any more than it is to build the similarly sized ships designed for very similar purposes which can be seen under construction in many a small yard on the shores of the Mediterranean today. In the seventeenth, and even in the eighteenth century only the biggest East Indiamen posed technical problems of construction and repair, similar to those of the larger men-of-war.² Such problems were instrumental in determining the size of the yards and it is not adequate to say simply, as does Professor Nef, that 'the construction of vessels of a hundred tons or more could not be undertaken without considerable capital'.³ As late as the early nineteenth century, 'wooden shipyards were generally no larger than the workshops of other crafts. Very little capital sufficed... the plant required was limited to a large cross-cut saw, bolt cutters, borers and a derrick'.⁴ Not only was the requisite physical capital small, but monetary problems arising from the need to purchase raw materials were solved by payment in instalments.⁵ Thus was the small yard, producing small or moderate-sized ships, perpetuated.

Until other evidence is produced, then, the dockyards remain as the outstanding examples of large-scale shipbuilding in seventeenth-century England. By the end of that century, as has been demonstrated, their significance as a source of demand for a miscellany of stores and as centres of substantial employment was considerable. Being state undertakings they are not comparable from the point of view of private investment opportunity with such enterprises as that of Abraham Crowley at Winlaton,⁶ but the scale of the needs represents nevertheless a significant intake of resources involving corresponding social and economic repercussions. The progress of the large man-of-war may or may not have influenced the

¹ The sole evidence quoted by Professor Nef in his article in *Econ. Hist. Rev.* (1934), was that of Defoe and that in Nef, *British Coal Industry*, I, 174 and II, 25-8, concerning the tonnages in the coal trade.

² Albion, *op. cit.* pp. 76-7, 88, 116.

³ Nef, 'War and Economic Progress', *Econ. Hist. Rev.* XII (1942), 27.

⁴ S. Pollard, *The Economic History of British Shipbuilding, 1870-1914* (unpublished Ph.D. thesis, Univ. of London, 1951), ch. II, p. 50. The author points out that the predominantly small scale of shipyards, whilst wood was the main material of construction, has been obscured by the 'disproportionate prominence given to the handful of very large establishments' which, by the early nineteenth century existed on the Thames, the Tyne and the Clyde. Cf. the account in Ehrman, *op. cit.* pp. 71-3, of *ad hoc* construction of a warship at Southampton in 1696.

⁵ *The Papers of Thomas Bowrey*, pp. 129-36. The agreement for the construction of a 141-ton merchant ship in 1704, the total cost of which was £732. 5s. provides for the payment of £150 on sealing the contract, three more instalments of the same sum to be paid on completion of specified stages of construction and the balance on launching. Naval vessels built on contract in private yards were paid for in a similar fashion.

⁶ A comparison which Professor Nef makes, *War and Human Progress*, p. 220. For details of Crowley's enterprise, see E. Lipson, *Economic History of England*, II, 178-83.

progress of the merchant ship. Commerce may or may not have had a greater influence on sea-power than sea-power on commerce. It remains clear, however, first, that the maintenance of sea-power on the scale practised by England in the later seventeenth century demanded a substantial diversion of capital and labour from the private to the public sector.¹ Secondly, it would seem that such large-scale shipbuilding as there was in the England of that age owed its existence more to the demands of naval warfare than to the aspirations of peaceful commerce.

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¹ Cf. Mr Ehrman's comment (p. 174) that 'the navy in 1688 was the most comprehensive and in some respects the largest industry in the country'.

RUSSIAN FINANCIAL POLICY AND THE GOLD STANDARD AT THE END OF THE NINETEENTH CENTURY

By OLGA CRISP

I

EVER since Russia had attained the status of a Great Power in the eighteenth century the military requirements for the maintenance of that position imposed on the Russian Treasury a task of a magnitude disproportionate to the largely natural economy of the country and the poverty of its people. This unbalance led to chronic budgetary deficits, despite increased taxation, and recourse to the printing press and foreign loans. It was no accident that both Russia's foreign indebtedness and the régime of paper money had their beginnings under Catherine II, whose reign marked Russia's advent as a Great Power.¹ As foreign borrowing was not always possible, the financial strain imposed by an active foreign policy was frequently reflected in inflation and the squeezing out of circulation of metallic currency. Since the first issue of *roubles-assignats* in 1768 in connexion with the first Turkish war, the volume of *assignats* issued had been swollen by the second Turkish war, the wars with Sweden, Poland and Persia under Catherine II, the Italian campaign under Paul and the Napoleonic wars under Alexander I to over 800 million roubles. By 1815 the value of the *rouble-assignat* in terms of silver had shrunk by nearly four-fifths.² Only the relatively long period of peace under Nicholas I after 1830 made possible the currency reform of 1839-43 associated with the name of Count G. F. Kankrin, whereby the 'credit rouble' freely convertible into silver replaced the *rouble-assignat* in the ratio of 1 : 3½.³ The Crimean War, as a consequence of which the volume of paper roubles more than doubled, forced Russia back on to an inconvertible currency. The downward tendency continued in the 1860's, and only during the period 1868-75 did M. K. Reutern succeed in strengthening the rouble and in arresting the violent fluctuations in the rates. The Turkish war of 1877-8, involving an expenditure of more than 1 milliard paper roubles, inflation and indebtedness, undid all Reutern's achievements.⁴

¹ Internal loans of any importance were hardly practicable before the 1880's. The first foreign loan was issued in 1769 through the banking house of de Smet and Reymont of Amsterdam. By 1914 the foreign debt of the Russian State had reached 4,229 million roubles. *Wirtschaft und Statistik* (Berlin, 1934), no. 11, pp. 360-3.

² *Polnoye Sobraniye Zakonov Russkoy Imperii* (subsequently referred to as P.S.Z.), nos. 13219 and 13220, Ukaz, 29 December 1768 O.S.; M. P. Kashkarov, *Denezhnoye Obrashcheniye v Rossii* (St Petersburg, 1896), II, 25.

³ The credit rouble will be henceforth referred to as 'paper rouble'. The reform, though bearing Kankrin's name, owed more to the initiative of Nicholas I. See *Zapiski Barona Korfa, Sbornik Istoricheskogo Obshchestva* (St Petersburg, 1896), xcvm, 159-69, 175-207.

⁴ J. de Bloch, *Les Finances de la Russie* (Paris, 1899), II, 256, Kashkarov, *op. cit.* II, 72—the circulation of notes had increased by over 400 million. P. Migulin, *Russkiy Gosudarstvenny Kredit* (Kharkov, 1899-1902), p. 1132—about 1,500 million roubles were borrowed during the war with Turkey and its liquidation.

In the long run an active foreign policy not only affected Russia's finances but tended indirectly to perpetuate the backwardness of her economy, as all potential savings were skimmed off by taxation and absorbed by the budget for military and other mainly unproductive expenditure. When defeat brought home the realization that to maintain her international status she must increase the productivity of her economy, the process of modernization was conditioned by the legacy of the past. Among the outstanding features of this legacy was the depreciated, unstable and inconvertible paper currency.

In itself the depreciation, though averaging about 38 per cent during the decade 1879-88, had been a lesser evil, for in the course of time prices did adjust themselves to the changed value of the currency. More damaging to the economic life of the country were the frequent and violent fluctuations with a range of over 30 per cent in some years.¹

II

The instability of the currency was prejudicial to Russia's credit and commercial relations with the West. That long-term foreign investment was discouraged by currency fluctuations is borne out by the unprecedented influx of foreign capital which immediately followed the stabilization of the rouble in 1894.² Similarly short-term credits from abroad tended to be influenced by the general economic condition of the country rather than by the soundness or otherwise of the individual enterprise. This probably explains why prior to 1894 only a few firms could obtain short-term credits from foreign banks.³ Witte also saw in the higher rate of interest some sort of insurance premium for the exchange risk.⁴ Russia's state finance likewise suffered, as most of her foreign loans were floated either in gold or silver or currencies based on them, whilst the state revenue was collected in paper currency.⁵ An unstable currency also affected foreign trade. Depreciation stimulated exports and restricted imports as well as softened the impact of falling agricultural prices resulting from overseas competition. On the other hand good harvests

¹ Calculated on the basis of Kashkarov, *op. cit.* I, 170, 175.

² During 1895-9, 226 new companies had been founded and 306.9 million gold roubles invested in joint-stock companies in Russia as against only 68 foreign companies and 97.8 million gold roubles of foreign capital during the entire period 1851-94. P. B. Ol', *Statistika inostrannykh kapitalov* (1899, forbidden by the censorship), quoted by St. Sharapov, *Dve Zapiski o russkikh finansakh* (Berlin, 1901), p. 66; also *Slavonic Review*, April 1933, p. 593; and C. T. Helfferich, *Das Geld im russisch-japanischen Kriege* (Berlin, 1906), p. 26.

³ These firms were the textile firms of Knoop, the Łódź (Russian Poland) textile firms, and the South Russia ironworks which could obtain credits in London, Berlin and Paris respectively. G. v. Schulze-Gaevernitz, *Volkswirtschaftliche Studien aus Russland* (Leipzig, 1899), p. 508.

⁴ S. Y. Witte, *Konspekt lektsiy o narodnom i gosudarstvennom khozyaystve...* (St Petersburg, 1912), p. 313. The onerous terms on which private railway companies in Russia in the 1870's acquired debenture capital seems to bear out the point made by Witte, and explains why the Russian Government decided to take over the bond issues from the companies at a flat rate, to float the bonds themselves as consols, and to provide the companies with resources as and when the need arose. See H. E. Fisk, *The Inter-Ally Debts* (New York, 1924), p. 294.

⁵ The annual service of the foreign debt required 98 million roubles in 1899. *Wirtschaft und Statistik*, *op. cit.*

which gave a favourable turn to the exchange rate of the rouble tended to keep down the exporter's paper rouble income from agricultural exports. Thus in 1890, following an appreciation of the paper rouble, grain producers who had expanded production in anticipation of a fall in rates faced ruin when this development failed to materialize.¹

Currency fluctuations likewise played havoc with Russia's commercial policy. From 1877 onwards customs duties were collected in gold, so that any rise in the exchange rate of the paper rouble tended to reduce the yield of import duties in paper roubles and to reduce the protective action of Russia's customs policy. Thus in 1890 to offset these consequences the duty on most imports was raised by 20 per cent and in 1891 Vyshnegradsky even proposed to peg the customs duties to the exchange rate of the rouble.² Moreover, the most serious argument advanced abroad against commercial treaties with Russia was that the unstable currency rendered her tariff concessions illusory.

All these considerations had made currency reform a priority issue in the last two decades of the nineteenth century. Political considerations were also of some importance in making currency reform a major issue. Schulze-Gaevernitz even saw in the reform 'die finanz-politische Seite von Russlands Weltpolitik'.³ An unstable currency constituted an element of weakness in Russia's international position, as in 1877 and 1887, especially since Germany could, and on occasion did, utilize her position as the main market for Russia's currency for purposes of intimidation.⁴ The political aspect of currency reform had been frequently referred to at various stages of the discussions preceding reform.⁵

III

The monetary reform as finally completed by Witte in 1897-9 consisted of the introduction of the gold standard and the devaluation of the currency. It introduced the gold rouble equivalent to one-fifteenth of an Imperial with a fineness of 17·424 doli (0·7774234 gr.) as the basic monetary unit.⁶ The choice of gold had been determined by the importance which gold had gained in international transactions since the 1870's. By then Russia had become an integral part of the world economic system. In foreign trade she occupied by 1895-6 the sixth place in the world with a turnover

¹ French Consular Reports, Paris, Archives Nationales, F12, 7173, Consul de Strotz, Riga 25 May 1891, Consul Cassas, Odessa 30 April 1891 and A. Sauvaire, Odessa 15 September 1894 and 16 October 1894; also *Ministerstvo Finansov 1802-1902* (St Petersburg, 1902), II, 114 (official publication of the Russian Ministry of Finance).

² E. Zweig, *Die Russische Handelspolitik seit 1877* (Leipzig, 1906), p. 32, and Vyshnegradsky's memorandum to the State Council of 15 April 1891, no. 4146 quoted by M. N. Sobolev, *Tamozhennaya politika Rossii...* (Tomsk, 1911), pp. 705 ff.

³ Schulze-Gaevernitz, *op. cit.* p. 462.

⁴ *Ibid.* p. 518.

⁵ P. P. Migulin, *Reforma denezhnogo obrashcheniya v Rossii i promyshlenny krizis* (Kharkov, 1902), pp. 112 and 124; also Witte, *op. cit.* p. 315.

⁶ The Imperial was a gold coin equal to ten gold roubles, used in the main in international settlements; its fineness had been adjusted by the Decree of 17 December 1885 whereby the Demi-Imperial, equal to 5 roubles, was almost interchangeable with the 20-franc piece, which was said to have facilitated the penetration of Russian securities to the French market. See E. Lorini, *La Riforma monetaria della Russia* (Turin, 1897), p. 56.

of 853.2 million gold roubles out of a world turnover of 22,318 million.¹ More than 50 per cent of her state and state-guaranteed debt consisted by 1893 of bonds payable in gold or foreign currency based on gold, almost all of which had been placed abroad.² Moreover, Russia had no special interest in the maintenance of silver as she had no silver production or reserves of any importance in face of a gold output by 1895 of about 15 per cent of world production.³

Historically the beginnings of the monetary reform can be traced back to M. K. Reutern who introduced payment of customs duties in gold,⁴ and also proposed to admit business transactions in gold at the rate of the day. The latter proposal was tantamount to official recognition of the premium on gold, but did not become law until 1895 because of the opposition of the State Council to any measure savouring of devaluation.⁵

IV

N. K. Bunge, formerly professor of economics at Kiev University, who initially shared the Council's view and thought to raise the value of the currency by withdrawing the notes issued during the 1877-8 war, soon realized that, as his predecessor in office, A. A. Abaza, so aptly expressed it, 'notes once in circulation are as difficult to withdraw as it is to separate wine from water'.⁶ Growth in population and in commercial and industrial activity had increased demand for money in circulation without any corresponding expansion of transport and banking facilities to counteract the need for an increased circulation.⁷ This fact and the desire to avoid currency fluctuations induced Bunge to take up Reutern's project to permit transactions in gold at the rate of the day. This project, however, was again vetoed by the State Council.⁸

These initial setbacks did not seriously affect Bunge's general financial policy, as he saw the solution of the monetary problem in a general growth and strengthening of the economy which would create favourable conditions out of which a sound currency would emerge as a natural consequence. By means of a more liberal taxation policy towards the peasantry and of agricultural credit for both the landowners and the peasants,

¹ St. O. Gulishambarov, *Vsemirnaya trgovlya v XIX veke i uchastiye v ney Rossii* (St Petersburg, 1898), p. 203. Russia's commercial relations with the countries of Asia were of relatively little importance, e.g. China accounted for 3.7 %, Persia for 1.7 % and Turkey for 1.6 % of Russian foreign trade turnover by the middle of the 1890's, *ibid.* p. 180; for the geographical distribution of Russia's grain exports, see M. V. Kaspéroff, *Commerce des céréales*, in *La Russie à la fin du 19e siècle*, M. V. de Kovalevsky, ed. (Paris, 1900) (Official Publication of the Rus. Min. of Finance).

² I. F. Gindin, *Russkiye kommercheskiye banki* (Moscow, 1948), p. 452; in 1883 the Russian Government undertook to pay in gold for the five odd loans which had been concluded in silver. See Migulin, *Reforma*, *op. cit.* p. 4.

³ Gulishambarov, *op. cit.* p. 52, also M. W. de Kovalevsky, *op. cit.* pp. 316-18.

⁴ P.S.Z. no. 56573, Ukaz 10 November 1876 O.S.

⁵ Kashkarov, *op. cit.* 1, 190.

⁶ Quoted by Migulin, *Reforma*, *op. cit.* p. 9.

⁷ E. de Montebello to Hanotaux, St Petersburg 8 November 1894, (copy) Arch. Nat. F 30, 331.

⁸ A. N. Gurev, *Denezhnoye obrashcheniye* (St Petersburg, 1903), pp. 190, 193.

Bunge sought to promote the increased productivity of agriculture, and by a protective customs policy he endeavoured to further industrial development.¹ This, however, was a long-term policy and, in the meantime, the support afforded to agriculture reduced revenue and increased the difficulty of balancing the budget.² In search of revenue he introduced a number of new duties, mainly indirect, which did not, however, make good the reduced revenue from peasant taxes.³ Bunge's experience throws an interesting light on the dilemma which any government, however well disposed towards the peasantry, had to face in a country where over 80 per cent of the population was in one way or another connected with rural occupations. What Bunge ultimately achieved was to replace direct by indirect taxation whilst the tax-payers remained largely the same. Bunge maintained that the cause of the country's budgetary difficulties lay in the cost of the war and naval ministries (over 32 per cent of average annual expenditure during 1881-6) and of the service of the public debt which had increased by 50 per cent since the Turkish war of 1877-8 (nearly 30 per cent of average annual expenditure).⁴ To meet the budget deficit recourse to new foreign borrowing was necessary which made the improvement of Russia's balance of trade all the more imperative. However, export surpluses, achieved mainly by import cuts, were not sufficient to balance Russia's external accounts, especially as agricultural prices in the 1880's were falling. At the same time agricultural production did not increase sufficiently to make up for falling prices. As import of foreign capital declined consequent upon the Turkish War,⁵ no new regions were being opened up. Moreover, the period of Bunge's administration was not favoured by good harvests. The political situation, with the Afghan crisis involving sales of Russian securities in London in 1885 and the Bulgarian crisis of 1886, was unfavourable to Bunge.⁶ The fall in the rate of the paper rouble to a level never before reached in its whole history, and Russia's financial weakness and helplessness in face of a critical situation, brought home the realization that 'pour se guérir il

¹ 1881—abolition of the Salt Tax on Bunge's advice by Abaza; 1886—abolition of the Poll Tax—altogether peasant taxes reduced by nearly one-third in relation to 1882; 1882—Peasant Land Bank founded; 1885—Land Bank for the Nobility; also Sobolev, *op. cit.* pp. 821 ff.

² The deficit on the Ordinary Budget during the six years of Bunge's administration amounted to about 230 million paper roubles—calculated on the basis of *Ministerstvo Finansov*, II, 640-3.

³ Zweig, *op. cit.* p. 24.

⁴ C. Skalkovsky, *Les Ministres des Finances de la Russie 1802-90* (tr. from Russian) (Paris, 1891), p. 268; S. S. Khrulev, *Finansy Rossii* (St Petersburg, 1909), table II and p. 96; also *Ministerstvo Finansov*, II, 642-3.

⁵ The average price for a pud of Russian wheat fell according to Russian customs statistics from 90.1 copecks during 1871-5 to 85.1 during 1876-80 and to 76.7 during the period 1881-5, *Sbornik svedeniy po istorii i statistike vneshney trgovli Rossii*, V. E. Pokrovsky, ed. (St Petersburg, 1902), I, 12; the average volume of grain exports increased by less than 6% in comparison with the period 1876-80, on the basis of *ibid.* p. 105. Note: Russian customs statistics tend to underestimate exports and overestimate the import figures, so that the balance of trade is normally better than warranted by Russian statistics. See A. Raffalovich, *Le marché financier* (Paris, 1897-8), p. 410 and S. Zuckerman, *Statistischer Atlas zum Welthandel* (Berlin, 1921), graphs and tables, Russia, p. 69.

⁶ For an analysis of the relation between currency fluctuations and political events, see Kashkarov, *op. cit.* p. 175, see also *Documents Diplomatiques Français (1871-1914)*, 1st ser. VI, Waddington to Freycinet (London, 10 April 1885).

fallait avoir recours à des remèdes sérieux et décisifs et peut-être même changer de médecin en trouvant un homme à poigne...'.¹ Such a man had been found in the person of I. A. Vyshnegradsky.

V

Like Reutern and Bunge, Vyshnegradsky understood the necessity for a thoroughgoing reform of the country's economic system, but, unlike the latter, considered such a reform unthinkable given the existing monetary system.² Nor had he any illusions as to the possibility or the desirability of restoring the paper rouble to par.³ His aim was to stabilize the paper rouble at the existing level or near it, and as the best means to this end he considered the admission of transactions in metallic currency and the accumulation of a gold reserve. Faced, like his predecessors, with the State Council's opposition to the first project,⁴ he concentrated on the latter. To create a favourable balance of payments, to expand exports and keep down imports and other expenditure abroad, to attract gold into the country and to direct this gold into the Treasury became the guiding, all-pervading objective of his policy.

Unlike Bunge, Vyshnegradsky had been greatly favoured by 'His Majesty the Harvest'. Two consecutive excellent harvests in 1887 and 1888 enabled Russian exports to reach the peak of the century, at a time when the fall in American wheat exports increased European demand for Russian wheat. Moreover, he employed a series of artificial measures to stimulate Russian exports, such as differential railway tariffs to encourage exports from distant areas, and a campaign against arrears in taxation to force the peasantry to market their grain.⁵

The increase in exports was accompanied by a fall in imports. Vyshnegradsky's commercial policy culminated in the Unified Tariff of 1891 which was dominated by fiscal and monetary considerations although the protectionist aims also had their importance.⁶ The result was considerable surpluses on the balance of trade averaging 311.2 million paper roubles annually during 1887-91 as against 68 million during 1882-6.⁷ In addition he endeavoured to prevent an increase in expenditure abroad, the main item of which was the service of the public debt. The replacement of the '5 per cent Mendelsohn Bonds' of 1877 by a 4 per cent loan of 500 million francs issued on the Paris market at the end of 1888 marked the beginning of the vast conversion operations on the French market and opened a new era in the history of Russia's foreign credit.⁸ By 1891 a debt of over a milliard gold roubles had been converted into a debt the nominal value of

¹ Skalkovsky, *op. cit.* p. 257.

² Zweig, *op. cit.* p. 24, and V. N. Lamsdorf, *Dnevnik (1886-90)* (Moscow, 1926), p. 352.

³ Migulin, *Reforma*, *op. cit.* p. 13.

⁴ Gurev, *op. cit.* p. 201.

⁵ P. I. Lyashchenko, *Ocherki agrarnoy evolyutsii Rossii* (St Petersburg, 1908), p. 265.

⁶ Sobolev, *op. cit.* pp. 491 ff.

⁷ Calculated on the basis of Pokrovsky, *op. cit.* pp. 117, 141.

⁸ Crédit Lyonnais, Service des Études Financières, Paris. Contract made at St Petersburg, 5/17 November 1888, unpublished, P.S.Z. no. 5 1415, and Ministère des Finances Françaises, Inspection Générale, Mission en Russie (Imprim. Nat., Paris, 1892), pp. 41 ff.

which was some 102 million gold roubles higher but the annual service of which represented a saving of 12½ million gold roubles.¹ At the same time Vyshnegradsky refrained as far as possible from new loans abroad, confining himself for indispensable loans to the home market which by then, thanks to Bunge's policy of encouraging the development of savings banks, was beginning to take up state securities on an increasing scale. The prices at which the issuing banks took up Russian loans, the prices of issue, the number of subscribers and the extent of over-subscription and bourse quotations all indicated the progressive improvement in Russia's credit abroad.²

Although the obvious improvement in Russia's financial administration and the general abundance of capital on the European money markets in the 1880's³ partly explain the success of Vyshnegradsky's foreign loan policy, political factors probably played an even greater role. In the 1880's and the opening years of the following decade France tried to end her isolation in Europe by winning Russian friendship,⁴ and Vyshnegradsky could not but welcome the opportunity of profiting financially from the political situation. He did not contemplate a total abandonment of the German market which during the years 1876-86 had acquired a virtual monopoly of Russia's credit, but he realized the dangers of dependence thereby created.⁵ He agreed with De Giers that 'a system which would permit Russia to choose between the Berlin and Paris bourses would be the wisest, most expedient and desirable for Russia.'⁶ If a break with the Berlin market actually took place, and if the French market gained a larger degree of influence over Russia's credit to the detriment of the German market, this had been largely due to Bismarck himself who, by encouraging a press campaign against Russia's credit, and by the *Lombardverbot*, caused a panic among German holders of Russian bonds.⁷ It was then that the French purchased considerable numbers of Russian securities 'expelled' from the Berlin bourse and the great conversion operations contemplated by Vyshnegradsky were carried out with great success on the French market. 'Les Français ont prouvé non en parole, mais en action, toute leur sympathie pour la Russie',⁸ wrote a contem-

¹ *Crédit Lyonnais, loc. cit. Historique de la dette consolidée russe*, 1889-91, unpubl.

² *Ministerstvo Finansov, op. cit.* II, 86, *Crédit Lyonnais, loc. cit.* draft of the 4% 1890 loan, n.d.; B. Nolde, *L'Alliance Franco-Russe* (Paris, 1936), p. 511; *Doc. Dip. Fran.* 1st ser. VII, Laboulaye to Spuller, St Petersburg, 15 May 1889.

³ *Ministerstvo Finansov, op. cit.* II, 85 and A. Raffalovich, *Les méthodes employées par les états au XIX siècle pour revenir à la bonne monnaie*, p. 27, in *Congrès International des Valeurs Mobilières* (2nd number, 30 April 1900, Paris).

⁴ Nolde, *op. cit.* pp. 488 ff. and A. S. Yeruslimsky, *Vneshnyaya politika germanskogo imperializma v kontse XIX veka* (2nd ed., Moscow, 1951), p. 203.

⁵ In January 1887 Bismarck estimated Russia's debt placed in Germany at 1200 million roubles representing about 2 milliard marks, according to E. Ibbeken, *Das aussenpolitische Problem Staat und Wirtschaft in der deutschen Reichspolitik 1880-1914* (Schleswig, 1928), p. 108; the *Kreuzzeitung* estimated German holdings of Russian securities at 2.5 milliard marks.

⁶ Lamsdorf, *op. cit.* p. 137.

⁷ *Die Grosse Politik der Europaischen Kabinette, 1871-1915*, vol. V, Herbert v. Bismarck to Fuerst v. Bismarck, 11 October 1887 and v. Boetticher to H. v. Bismarck, 10 November 1887; *Doc. Dip. Fran.* 1st ser. VI, Laboulaye to Flourens, 8 August 1887, and Schulze-Gaevernitz, *op. cit.* p. 552.

⁸ Skalkovsky, *op. cit.* p. 297.

porary writer on financial matters, although the French capitalists who purchased Russian bonds were handsomely rewarded. The rise in the price of Russian securities which followed brought them by the middle of the 1890's a profit of some 540 million francs, not to mention the considerable profits on issues, whilst the Germans who had substituted Italian rentes for Russian securities lost heavily on the deal.¹ French readiness to absorb Russian securities had also been assisted by the commercial conflict with Italy which had cut off the Italian market from French capital.²

Although Vyshnegradsky had been less successful in restricting the expenditure abroad of Russian travellers 'qui s'y distraient de la mélancolie monotone de leur climat et y dépensent en quelques mois les revenus de quelques années',³ the export surplus running at some 300 million paper roubles annually was sufficient to balance the country's external accounts and to ensure an influx of gold into the bargain.⁴

In order to take advantage of the new situation and to strengthen the gold reserve for monetary purposes the government still had to find funds for the purchase of gold bills abroad from Russian exporters. This Vyshnegradsky in part did by increasing revenue from indirect taxation, state-owned railways, Crown lands and forests, and by reducing expenditure on the service of the external debt already described above.⁵ But although he had put an end to budgetary deficits, and even produced surpluses, these were not sufficient to make possible the purchase of gold bills abroad on the scale he contemplated. He therefore employed a portion of the resources of the State Bank and of the reserves of the Treasury for this purpose. As the gold thus acquired could not be circulated the resulting immobilization of the funds of the State Bank may explain the shrinkage in its commercial activities during the period 1888-92, not otherwise warranted by the state of the market, and the need for special paper rouble issues in 1891-2 for relief to regions hit by harvest failures.⁶ In purchasing gold bills Vyshnegradsky exercised considerable caution to avoid undue depreciation of the paper rouble. There was even some export of gold from Russia, the increase in the gold reserve inside the country being due to domestic output.⁷ The realization of bills and the withdrawal of gold from abroad called for even greater prudence in order to avoid disturbing the money markets, as in 1891 when the critical position of the London money

¹ French Consul General at Warsaw, (copy) Warsaw, 25 January 1896, Arch. Nat. F 30, 330. The Italian rente which stood at 102 in October 1887 fell to 80 in October 1893, Schulze-Gaevernitz, *op. cit.* p. 553.

² G. Martin, 'Histoire économique et financière', p. 452 in vol. x of Gabriel Hanotaux, *Histoire de la nation française* (Paris, 1927), also E. V. Tarle, *Evropa v epokhu imperializma 1871-1919* (Moscow, Leningrad, 1928), p. 33.

³ Verstraete to Delcassé, St Petersburg, 31 March 1898, (copy) *Formation de l'encaisse or et balance économique*, Arch. Nat. F 30, 331; estimates of travellers' expenditure abroad differed widely; an official computation put it at 40 million on the average annually during 1888-91.

⁴ No exact figures on the balance of payments are available; according to an official computation the surplus on the balance of payments during the period 1888-91 was about 70 million gold roubles annually, Verstraete to Delcassé, 31 March 1898, *loc. cit.*

⁵ *Yezhegodnik Ministerstva Finansov 1869-1913* (St Petersburg, 1892), p. 76.

⁶ Verstraete to Delcassé, 31 March 1898, *loc. cit.*

⁷ Bompard to Ribot, 22 July 1895, (copy) Arch. Nat. F 30, 331.

market, where the greater part of Russia's credit balances was at that time maintained, had to be considered.¹ By the end of 1892 the withdrawal operations from abroad were almost complete; and by January 1893 the gold reserve amounted to 581 million gold roubles representing an increase of 281.5 million roubles during Vyshnegradsky's administration.²

At the same time Vyshnegradsky's attempts to stabilize the currency met with complete failure, notwithstanding the increased gold reserve and the general improvement in the country's finances. Fluctuations in the rate of the paper rouble were even more violent than before, for which political factors were largely responsible.³ However, the Minister himself had some share of responsibility for the failure, for while concentrating on the accumulation of a gold reserve he lost sight of his other objective, and frequently encouraged a fall in the rate to stimulate exports.⁴ The most important factor in the instability of the currency, however, was the speculation in paper roubles which developed on the Berlin bourse, an important centre for transactions in Russian currency since the 1870's. Originally the forward transactions in paper roubles which had developed on the Berlin bourse had been a positive factor in promoting commercial relations between the two countries, widening the market for the paper rouble and facilitating the flotation of 'credit loans'.⁵ In the 1880's, however, these transactions, though in some cases still genuine, had on the whole taken on the character of purely speculative deals, and the paper rouble became the favourite object of bourse speculation which also involved Russian securities and her external credit in general and furthermore furnished Germany with a political weapon, as in 1887.⁶ Unfortunately also, Russian banks, exporting firms who had an interest in low exchange rates, and the Minister of Finance himself participated in this speculation.

The famine which affected some twenty provinces of Russia in 1891, the harvest failure in some localities, and a cholera epidemic in 1892 threatened to thwart Vyshnegradsky's plans,⁷ and his insistence on the continuation of the export drive in face of the plight of the population were considered as characteristic of his whole policy based on the exploitation of the agricultural population by ruthless taxation and 'starvation exports'.⁸ But although he was responsible for an increase in certain indirect taxes, a study of his budgets does not quite confirm the customary opinion that

¹ Lamsdorf, *op. cit.* p. 338.

² Verstraete to Delcassé, 31 March 1898, *loc. cit.*

³ Kashkarov, *op. cit.* I, 175.

⁴ S. N. v. Propper, *Was nicht in die Zeitungen kam; Erinnerungen des Chefredakteurs der 'Birschevija Vedomosti'* (Frankfurt a. M., 1929), p. 258, and Schulze-Gaevernitz, *op. cit.* p. 476.

⁵ 'Credit loans' were loans issued and payable in 'paper roubles', whilst 'metallic loans' were loans issued in gold or silver or currencies based on these metals.

⁶ For the history of the Berlin bourse as the market for Russian currency see Schulze-Gaevernitz, *op. cit.* pp. 450-524.

⁷ Copy of the report of the French Chargé d'Affaires at St Petersburg, De Vauvineux, 4 November 1891, Arch. Nat. F 30, 328 and *loc. cit.* F 12, 7173, Consul in Odessa, 20 November 1893, also *Ministerstvo Finansov*, II, 311.

⁸ Propper, *op. cit.* p. 150; M. Bogolepov, *Obshchestvennoye Dvizheniye v Rossii v nachale, xx veka* (St Petersburg, 1909), I, 158.

he pursued a policy of 'sucking dry' the agricultural population to find the resources required by the Treasury. The relative promptness with which direct taxes were paid may indicate harsh methods of collection, but the obvious connexion between harvest results and taxation revenue does not quite confirm this assumption. It seems feasible that his predecessor Bunge's policy, slow in showing improvements in the country's public finance, contributed to the well-being of the agricultural population and indirectly to a higher state revenue under Vyshnegradsky, a conclusion suggested by the increase in small savings in state savings banks.¹ Furthermore, an examination of harvest and grain export figures indicates a close correlation between these two phenomena.²

On the other hand, his attitude to the project of establishing a Ministry of Agriculture would seem to illustrate his general lack of interest in that most vital branch of the economy which provided a livelihood to the overwhelming majority of the population and on which, in the last resort, depended the success of the schemes of the Minister of Finance.³ Furthermore, by concentrating with such zeal on his financial operations and on the husbanding of state resources, he did little to develop the productive forces of the country. Based as his policy was on harnessing, and not on extending, the existing forces, its success depended in the last resort on the strength and resistance of these forces. The famine of 1891-2 seemed to indicate that the limit of endurance had been reached. Also Vyshnegradsky's almost prohibitive customs policy caused retaliation on the part of the Germans which eventually developed into open tariff war,⁴ whilst the 3 per cent Gold Loan of 1891 met with very incomplete success owing to the hostility of the Rothschilds consequent upon the anti-Jewish policy of the Imperial Government.⁵ Nevertheless, whatever the weaknesses of the system built up by Vyshnegradsky, the six years of his administration marked an enormous advance in Russia's finances, and he went a long way towards bringing the monetary reform near completion.

VI

About Vyshnegradsky's successor, S. Y. Witte, one could say without qualification, more than about any other Russian finance minister, that he had a long-term policy, or rather a theory of economic policy, which, in spite of several deviations in practice, underlay all his activities as Minister of Finance.⁶ He saw the roots of the country's economic backwardness in the one-sided character of its economy, which had put Russia's very existence at the mercy of the annual harvest and which turned even

¹ Delamotte, Inspecteur des Finances, *Mission en Russie*, 1 February 1905, Arch. Nat. F 30, 331 and Khrulev, *op. cit.* table no. xxii. ² Pokrovsky, *op. cit.* p. 6.

³ Lamsdorf, *op. cit.* p. 350.

⁴ Zweig, *op. cit.* pp. 38 ff.

⁵ *Doc. Dip. Fran.* 1st ser. viii, Waddington to Ribot, 11 May 1891; Herbette to Ribot, (copy) Arch. Nat. F 30, 332 and *Doc. Dip. Fran.* 1st ser. ix, D'Estornelles de Constant to Ribot, 1 October 1891.

⁶ An exposition of Witte's principles can be found in his 'The national economy and Frederic List', in his *Konspekt lektsiy...*, *op. cit.* and in his annual memoranda to the Emperor which accompanied the budget.

a partial harvest failure into a national calamity. The way out of this predicament was to promote rapid industrialization of the country or, as Witte called it, 'widening the application of national labour'; and the means to this end was the protection of the young Russian industries and, even more important, the intensive application of foreign capital.¹ His belief that only foreign capital could enable Russia to speed up her economic growth made him attach great importance to the country's credit abroad. An unstable currency, in his opinion, obscured the real progress made by Russia in the financial and economic spheres, and prevented foreign financial circles from fully appreciating the promptness with which Russia had always met her commitments abroad, whatever the circumstances.²

With the immediate object therefore of stabilizing the currency he took energetic measures to combat speculation in paper roubles. Having first of all ascertained the extent of the movements of paper roubles in and out of the country, by making speculative currency transactions illegal and by imposing a strict control over the activities of the Russian bourses, he succeeded in overcoming internal speculation in the rouble.³ Foreign speculation he eliminated by a carefully staged campaign of counter-speculation against the Berlin bourse.⁴ The *coup de force* of October 1894, though met by an outburst of indignation from German official and financial circles, proved effective,⁵ as demonstrated by the movement of the rates of exchange of the paper rouble from 1894 onwards.⁶ To reduce to a minimum the fluctuations still taking place he ordered the State Bank to continue purchasing and selling gold bills to maintain fluctuations within the gold points.

Having *de facto* stabilized the currency Witte began to contemplate introducing gold into circulation which was of immediate importance in connexion with the paradoxical situation in which the State Bank and Treasury found themselves as a result of Vyshnegradsky's policy of purchasing gold with their resources. The situation was aptly described by Maurice Verstraete as follows: 'la situation de la Russie thésaurisant de l'or improductif ressemblait à celle d'une armée dont l'armement va être renouvelé; elle conserve ses anciens fusils pendant que des fusils nouveaux s'entassent momentanément à rien et constituent un luxe qu'il faut payer.'⁷ Being aware of the conservative attitude of the State Council to currency reform Witte tried to introduce partial gold circulation in the form of gold transactions at the rate of the day; and, unlike his predecessors,

¹ Witte, *Konspekt*, *op. cit.* pp. 141, 207, 215.

² Witte's memorandum to the State Council of 14 March 1896, quoted by Migulin, *Reforma*, *op. cit.* pp. 112-22.

³ P.S.Z. no. 9461, Ukaz 29 March 1893 and no. 9741, Ukaz 8 July 1893.

⁴ Propper, *op. cit.* p. 230; A. Sauvaire, Consul in Odessa, to G. Hanotaux, 29 October 1894, (copy) Arch. Nat. F 12, 7173; Schulze-Gaevernitz, *op. cit.* p. 526.

⁵ For German reaction to Witte's 'coup de force', see M. de Chalmes, French Consul General at Warsaw to G. Hanotaux, 31 October 1894, (copy) Arch. Nat. F 30, 329.

⁶ For the evolution of the rates of exchange of the paper rouble on London, see Kashkarov, *op. cit.* 1, 170.

⁷ Verstraete to Delcassé, 31 March 1898, *loc. cit.*

he succeeded in winning the consent of the Council to such a measure.¹ When this measure, however, failed to act as a substitute for gold circulation because of lack of confidence among the public, Witte had to resort to the 'unconstitutional' procedure of introducing full gold circulation by a series of separate imperial decrees.² Not until 7 July 1899 was the new Monetary Statute consolidating the Imperial Decrees promulgated with the legislative sanction of the State Council. This procedure was necessary because the Council would have agreed to the convertibility of the paper rouble only on the basis of parity with gold, while Witte realized that the raising of the paper rouble rate to par was hardly practicable, as it could be achieved only in one of three ways: by gradually strengthening the paper rouble; by substantially increasing the gold reserve; or by reducing the volume of paper roubles in circulation—all of them impossible or dangerous.³ Even assuming that raising of the paper rouble to par with gold was possible, the cumulative effect of such a measure would have been to worsen Russia's balance of payments position. Russian agricultural producers in particular would have been severely hit, as grain prices would have immediately fallen, while costs of production, with the exception of imported machinery, would have adjusted themselves only slowly to the changed conditions. This would have been the case, particularly in the Eastern and Southern regions, the centres of export-grain, where wages were paid in money and where, especially as labour in the South was migratory, agricultural producers had to compete for labour with the mine- and mill-owners.⁴ As debtors whose debt consisted almost entirely of 'credit loans', agricultural producers would have been faced with an increase of the real burden of interest payments of one-third. Likewise the Russian State would have found its liabilities on account of that part of its Public Debt which was expressed in paper roubles increased by a third.⁵

Thus only on the basis of devaluation could the convertibility of the paper rouble against gold be established without adversely affecting the economic relations of the country. As to the precise rate at which the paper rouble was to be exchanged against gold, that of $1\frac{1}{2} : 1$ or $66\frac{2}{3}$ gold copecks to one paper rouble had been considered the most advisable. This rate had been the nearest to the arithmetical average of the average rates of the paper rouble in gold copecks since 1877, and also to the rouble rates as determined by the country's balance of trade which according to

¹ *Ministerstvo Finansov*, *op. cit.* II, 410 and P.S.Z. no. 11644, Ukaz of 8 May 1895.

² P.S.Z. nos. 13612, 14504 and 14633 and *Yezhegodnik*... for 1898, Report on the Budget for 1897. The most important of these were those of 3 January 1897, 29 August 1897 and 14 November 1897.

³ The first method would have meant postponing reform for many decades and required favourable political and economic conditions during this period; the second would have increased the country's foreign indebtedness beyond the safe margin; the third proved impracticable during 1881-7 when it proved impossible to withdraw the war issues.

⁴ Schulze-Gaevernitz, *op. cit.* p. 472.

⁵ Russia's state and state-guaranteed 'credit debt' amounted to 3,330.3 million paper roubles by 1 January 1896 (Gindin, *op. cit.* p. 452). The service of this debt amounted to about 144 million paper roubles annually by 1 January 1896. See French Consul General Bogard, at Warsaw, 17 December 1897, (copy) Arch. Nat. F 30, 330.

official calculation averaged 63.94 gold copecks during 1878-94 and 66 $\frac{2}{3}$ copecks during 1888-94.¹

By the Reform of 1897-9 the parity between the paper and gold rouble was restored by reducing the value of the gold rouble in proportion to the depreciation of the paper rouble through a lowering of the gold content of the gold rouble, so that the Imperial and the Demi-Imperial equalled 15 and 7 $\frac{1}{2}$ roubles respectively. The State Bank had the right to issue notes up to 600 million with a 50 per cent gold backing and over and above that amount each note required 100 per cent backing. This stringent regulation deprived the monetary system of the necessary elasticity in times of crisis when more cash might be required. Russia, however, was not yet ripe for the adoption of the system current in Germany, for example, where, in addition to gold, first-class securities were used as cover for the note issue.² In order to secure the necessary elasticity of the monetary system the government maintained gold reserves far in excess of legal requirements and refrained from fully exercising their right to issue uncovered notes. The maintenance of this large gold reserve was a luxury, especially in view of Russia's position as a debtor state, but was felt to be necessary for purposes of elasticity and to sustain foreign confidence. On the other hand the State Bank on which devolved the task of controlling the currency had not been adequately reorganized for the purpose, as the old Statutes of the Bank contained many clauses incompatible with its new position as a bank of issue and also clauses which gave the Minister of Finance scope for abusing the right of issue for fiscal purposes.³

In spite of its defects the monetary system justified the hopes placed in it. Internally it solved the problem of the immobilized funds of the State Bank and Treasury, and externally it stimulated the import of foreign capital into Russian industry to such an extent that during the single year 1898 the amount of foreign capital invested exceeded that of the whole period 1851-92.⁴ This method of acquiring foreign capital, besides promoting Witte's plans of industrialization, was more acceptable to him than formal flotations of loans abroad by the Russian Government, which tended to raise doubts as to the true state of Russia's finances. His preference for unobtrusive procedures is also seen in his practice of raising capital by selling Russian securities through the medium of foreign banks and by short-term credit operations.⁵ All these transactions were rendered possible by the prevailing confidence in the stability and convertibility of the currency.

A vital question remains to be answered, namely, how Witte managed to accumulate the imposing gold balances which by the end of 1897

¹ Kashkarov, *op. cit.* I, 170. E. de Montebello to Berthelot, St Petersburg, 12 January 1896, (copy) Arch. Nat. F 30, 330; I. K. Ozerov, *Osnovy finansovoy nauki* (Moscow, 1908), p. 265.

² The average length of commercial bills in Russia was 137 days during 1889-94, Gindin, *op. cit.* p. 266, their amount was limited and there were numerous protests, V. T. Sudeikin, *Gossudarstvenny bank* (St Petersburg, 1891), p. 427.

³ I. K. Ozerov, *Die Finanzpolitik*, in *Die Russen ueber Russland*, J. Melnik, ed. (Frankfurt a. M., 1906), pp. 231 ff.

⁴ P. B. Ol' in Sharapov, *op. cit.* p. 66.

⁵ Cochery to Hanotaux, 11 June 1897, (draft) Arch. Nat. F 30, 335; Crédit Lyonnais, note on sales of 4% *Rente Intérieure Russe* during February-July 1899, unpubl.

amounted to 1548.45 million roubles of the new coinage representing an increase of 676.95 million during his administration.¹ A part of this increase can be accounted for by the domestic gold output which during the period 1893-7 amounted to over 239.5 million.² An examination of Russia's bullion and specie balance indicates an excess of gold imports of 436.9 million³ not accounted for by Russia's balance of trade; on the contrary, there had been a definite deterioration in this respect as compared with the export surpluses obtained under Vyshnegradsky. There had been an increase in imports, especially of machinery and metal goods in connexion with the new minister's programme of industrialization.⁴ Witte considered this increase a temporary phenomenon only, and believed that within a short space of time Russian industries, provided with the essential materials and equipment from abroad, would be able to satisfy internal demand. He even dreamed of capturing Far Eastern markets for the products of Russian industry. Witte's attitude was certainly more far-sighted and constructive than the rigid and restrictive mercantilism of his predecessor, but, though Witte did score substantial successes with regard to domestic industrial output, demand grew at a faster pace, and it was not until the turn of the century that an industrial crisis stemmed the tide of fast growing imports.⁵ Other factors contributing to increases in imports were the tariff reductions consequent upon the Commercial Treaty of 1894 with Germany and the stabilization of the currency which freed importers from fears of loss from the constantly depreciating currency.

At the same time the value of Russian exports fell, although the Minister did all in his power to stimulate grain exports by what has been described as a 'railway Drang nach Osten' and by a railway tariff policy encouraging exports of grain from the newly opened eastern regions.⁶ Although Witte succeeded in increasing the volume of grain exports both in absolute figures and as a percentage of the annual harvest,⁷ the fall in international grain prices depressed the value of Russian exports, so that the balance of trade deteriorated,⁸ and the surplus balances achieved by Vyshnegradsky were, from 1892 onwards, replaced by a deficit.⁹

How then did Witte succeed in bringing the accounts into equilibrium? Above all, how was he able to ensure an appreciable surplus on the bullion

¹ Kashkarov, *op. cit.* I, 226. Included is the gold which went into circulation.

² *Ibid.*

³ *Ibid.*

⁴ Zweig, *op. cit.* pp. 156 ff.

⁵ According to M. Tugan-Baranovsky, *Russkaya Fabrika* (6th ed., Moscow, 1934), p. 265 the value of industrial output increased by 1,104 million roubles during the period 1893-7, mining industries showing the largest increase. Imports increased from an annual average of 399.19 million paper roubles during 1887-91 to 534.98 during 1893-7, calculated on the basis of Pokrovsky, *op. cit.* p. 141.

⁶ Lyashchenko, *op. cit.* pp. 269-70.

⁷ During 1893-7, 52.9 thousand quarters of grain and 15.7 % of the annual harvest had been exported on the average annually against only 40.7 thousand quarters representing 14.3 % of the average annual harvest during 1887-92 (1 Russian quarter of wheat equalled about 360 lb.; the other grains were somewhat lighter). Calculated on the basis of Pokrovsky, *op. cit.* p. 6.

⁸ The average value of grain exports, despite the increased volume, fell from 366.7 million paper roubles per annum during 1887-91 to 337.8 million during 1893-7, and the export surplus fell from an average of 311.2 to 140.0 million paper roubles. Calculated on the basis of Pokrovsky, *op. cit.* pp. 105, 117, 141.

⁹ According to P. B. Ol' the deficit on the balance of payments amounted to 96.4 million gold roubles, quoted by Verstraete in his report to Delcassé of 31 March 1898, *loc. cit.*

and specie balance? An examination of the credit operations of the Russian State abroad explains this. During the period 1893-8 the various credit operations of the Russian Government abroad yielded 1,100 million roubles.¹ Thus Witte could form large credit balances in the name of the State Bank and the Treasury abroad and by drawing bills on its foreign correspondents the government could balance the external accounts and even use part of the credit balances for the purpose of strengthening the gold reserve for monetary purposes.

Likewise the influx of foreign capital into industrial enterprises, which was the basic factor in the industrial expansion of the 1890's, affected the monetary position in the same way as did the flotation of new loans or the sale of old bonds abroad. During 1893-8 approximately 700 million francs of foreign capital were invested in Russian joint-stock companies.² Not all this capital entered the country effectively; large amounts remained in the hands of foreign bankers and brokers; also Russians who sold their mines, mills or land to foreigners were often paid in part at least in shares. There is no doubt, however, that a large amount of this capital crossed the frontier effectively. The well-informed Maurice Verstraete believed that the effective capital stood very near its nominal amount.³ The fact that a portion of this capital entered Russia in the form of machines, tools, raw materials, etc., does not diminish the importance of this capital influx from the monetary point of view as such items were accounted for on the debit side of the balance of trade.

All this foreign capital attracted in one form or another only indirectly contributed to the solution of the monetary problem. Directly, this foreign capital served to increase the productivity of the economy and to develop the dormant natural resources of the country. This applied not only to the credits directly devoted to industrial purposes, but also Russia's state and state-guaranteed debt had been with few exceptions used to increase the country's economic potential, mainly in the construction of railways.⁴ Railways stimulated industrial and commercial activity, as did the influx of capital into industrial enterprises; and both contributed to the growth of state revenue. The credits from abroad rendered Russia a double service: they had first been used to strengthen the economy and secondly they contributed to the formation of large, easily realizable funds in gold at the disposal of the government. Furthermore, although Russia's debt increased substantially, there was little increase in the amounts due for the service of this debt as the improvement in Russia's credit abroad made possible the conversion of the public debt, which resulted in the

¹ Verstraete to Delcassé, 30 March 1899, Arch. Nat. F 30, 332; 1 rouble equalled about 2.66 francs after 1897.

² *Ibid.*; the figures given by P. B. Ol' quoted by Sharapov, *op. cit.* p. 66 were twice as high as those given by Verstraete; in 1898 the British had been particularly active mainly in the oil industry and had invested 88.75 million francs out of a total of 359 million.

³ M. Verstrate, *Les capitaux étrangers engagés dans les Sociétés industrielles* (Paris, 1900), p. 6.

⁴ During 1893-8 the railway-net increased from 32.9 thousand km. to 44.6 thousand. *Mirovyye ekonomicheskiye krizisy 1848-1935*, p. 517.

reduction of the average nominal rate of interest from 4.19 per cent in 1891 to 3.86 per cent in 1902.¹

Despite the substantial increase in the public debt Russian state credit abroad reached a level never attained before; her 4 per cent gold rente which in 1880 stood below par approached par by 1895 and exceeded it by 1898; the 3 per cent and 3½ per cent gold bonds stood almost as high as the equivalent German bonds.² Russian loans lost the speculative character which they had in the main possessed when held by Germans and became 'placements du père de famille'³ enjoying in the heart and 'portefeuille' of the French *rentier* a place almost equal to that of the French state *rente*. This spectacular success of Russia's credit policy abroad was due on the one hand to the relative abundance of capital on the international money markets and on the other hand to the financial advantages derived by Russia from the alliance with France where the bulk of Russian loans had been placed⁴ and whence also came a large part of the capital invested in private enterprise in Russia.⁵ The stabilization of the currency and the obvious determination of the Minister to introduce metallic circulation and the productive application of the foreign credits were a factor in strengthening state credit abroad the importance of which cannot be over-emphasized.

Two more factors should be mentioned. The first is the use of publicity through official channels and through the French Press, the 'abominable vénalité' of which proved very useful.⁶ The second factor was the skill, bordering on genius, of the Finance Minister. He knew how to avail himself in time of the opportunities offered by the contemporary situation, and accomplished the reform just before the deterioration in the international money market which set in in 1899. By a skilful use of the Treasury balances abroad, those 'principaux pivots de sa politique financière', he could create relative abundance on European money markets when about to float a loan so that 'en dernière analyse l'emprunt russe est couvert au moyen de l'or russe lui-même'.⁷

If all this skill, creative energy and practical sense were essential factors in bringing the monetary reform to a successful conclusion perhaps even

¹ Helfferich, *op. cit.* p. 14.

² *Grosse Politik*, v, Caprivi to Kaiser Wilhelm II, 10 November 1894, and *Bulletin Russe de Statistique Financière et Législation* (St Petersburg, 1898), p. 433.

³ A phrase employed in an unsigned and undated note placed with the correspondence relating to the 3½% Gold Loan 1894 which I attribute to Poincaré, then Finance Minister. Arch. Nat. F 30, 332.

⁴ Tugan-Baranovsky, *op. cit.* p. 267; the French Consul-General in Warsaw, in his report of 3 March 1897 quoted above, estimated that out of Russia's foreign debt of 3½ milliard roubles (over 9 milliard francs) about 7 milliard francs were placed in France.

⁵ Out of a total of over 2,075 million francs of foreign capital in Russian joint-stock companies, French capital accounted directly for 692.3 million and for another 100 million on account of Belgian capital which represented French investment. Verstraete, *Les capitaux...*, *op. cit.*

⁶ A phrase employed by the financial agent of the Russian Government in Paris, Arthur Raffalovich, when reporting on subventions paid to the French Press.

⁷ The role of the Treasury's foreign balances and the techniques employed by the Russian Finance Minister are fully described in a report of Verstraete to Delcassé of 18 June 1900. Arch. Nat. F 30, 335.

greater skill and a more sustained effort was required in the years to come for the purpose of maintaining a sound and stable currency. Before the new productive forces set in motion could enable Russia not only to balance her international accounts without resort to borrowing but also to assure a reasonable standard of living for her population, many years of 'starvation exports' and of heavy taxation lay ahead of her. However, a *sine qua non* of her ability to steer her course through difficult times and emerge as a country with a modern, efficient economic organization, capable of paying her way, was the maintenance of peace.

That Witte himself was fully aware of this is brought out in his report to the Emperor in January 1898 where he stresses the connexion between foreign policy and state finance and issues a warning against 'dangerous fancies' and advises the pursuit of a peaceful foreign policy 'alien to aggressive aspirations'.¹ Furthermore, on the short-term view he was conscious of the dangers to his monetary policy inherent in heavy military expenditure which not only added to the budgetary burden but also represented a drain on reserves of foreign exchange, as much of this military expenditure involved the purchase of military and naval equipment from abroad.² Maurice Verstraete's apt comment on Witte in his much-quoted report to Delcassé of 31 March 1898 was that 'En dépit de son tempérament combatif il serait peut-être à l'heure actuelle l'homme le plus pacifique de l'Europe'.

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¹ Report of the Minister of Finance to H.M. the Emperor on the budget of the Empire for 1898, St Petersburg, 1898, p. 12.

² Verstraete to Delcassé, St Petersburg, 15/28 March 1902, *Notes sur les finances de la Russie*. Arch. Nat. F 30, 329.

SHORT ARTICLE

OVERSEAS TRADE IN THE REIGN OF HENRY VII: THE EVIDENCE OF CUSTOMS ACCOUNTS

By PETER RAMSEY

SINCE 1881, when Schanz published his classic work,¹ the study of England's trade throughout the sixteenth century has been based mainly on the statistics which he compiled from the Enrolled Customs Accounts for the reign of Henry VIII alone. The purpose of this article is to introduce a table representing the total overseas trade of England during the preceding reign,² which will in part bridge the gap at present existing between the work of Schanz and that of the contributors to *Studies in English Trade in the Fifteenth Century*.³ Since the evidence afforded by the few surviving Particulars of Accounts for this period is very fragmentary, this must necessarily form the basis of any statistical account of England's overseas trade under Henry VII, but that is not to say that it is a satisfactory basis. Both the reliability of the figures themselves, and the interpretation of them if their reliability be assumed, are subject to grave doubts.

Recent research has drawn attention to the smuggling and evasion of customs prevalent in the latter half of the sixteenth century, which, it is suggested, reached such proportions that the customs accounts cannot be trusted to give a true picture of the actual volume of trade.⁴ The accounts for the earlier period have not so far been seriously called in question, but since some of the arguments used might appear to apply as well to the reign of Henry VII as to that of Elizabeth, it seems necessary to attempt some assessment of the volume of smuggling at the beginning of the sixteenth century, and thus, indirectly, of the reliability of the customs accounts which leave such activities unrecorded.

The picture is at first sight an alarming one, since there is plenty of evidence to show that the problem was far from being new and unfamiliar in 1558. Statutes of the fifteenth century allege that the King is 'daily defrauded and greatly deceived of his Custom and Subsidy',⁵ that serious losses of revenue are incurred 'as well for lack of good Search in the Ports and Creeks within the Realm of England, as by other crafty Imaginations of divers Persons',⁶ and refer darkly to 'Searchers and Surveyors, which take no Fee, but privy Rewards for doing wrong to the King'.⁷ Efforts to ensure that customs officials should be

¹ G. Schanz, *Englische Handelspolitik gegen Ende des Mittelalters*, 2 vols. (Leipzig, 1881).

² Compiled from P.R.O., Exch. L.T.R., Enrolled Accounts, Customs 23, 24. It was originally hoped to present a full set of tables representing also the trade of each individual port, but lack of space has unfortunately made this impossible.

³ *Studies in English Trade in the Fifteenth Century*, ed. E. Power and M. M. Postan (1933).

⁴ G. D. Ramsay, 'The Smugglers' Trade; a neglected aspect of English commercial development', *Trans. Roy. Hist. Soc.*, 5th ser. II (1952); N. J. Williams, 'Francis Shaxton and the Elizabethan Port Books', *Eng. Hist. Rev.* LXVI (1951), 387-95.

⁵ 11 Hen. IV, c. 7.

⁶ 11 Hen. VI, c. 14.

⁷ 27 Hen. VI, c. 2.

resident in their office and refrain from illegal extortions and trade on their own account, and that merchandise should be shipped at appointed wharves under proper supervision, show an early awareness of the defects of the customs administration.¹ An 'Ordinance devised for thadvancement of the Custome', dated 1536, alludes to the continued 'gret suttlyll & crafty ynvencions' of both denizen and foreign merchants, and to the lack of uniformity in the customs system.² More dramatically, a certain George Whelpeley undertook in 1540 to lay bare the malpractices of 'well nere all the custumers comptrollers and serchours within the realme of Englande', a claim which the king understandably took 'veary earnestly', though the results seem to have been meagre.³ If such malpractices continued, it was clearly not for want of due warning.

The evidence of the Memoranda Rolls of the King's Remembrancer of the Exchequer,⁴ the main source of information on specific cases of smuggling, might at first sight seem to bear out these eloquent assertions. Throughout the reign there was a steady flow of cases from all points along the south and east coasts, though, as might be expected, the worst areas were those around London, the busiest port in the kingdom, and Devonshire and Cornwall, where the configuration of the coastline was especially favourable and experienced personnel were readily available. All kinds of merchandise were smuggled, though naturally the goods mainly affected were those of small bulk but high value, and wool, which bore a high rate of duty and whose export elsewhere than to Calais was forbidden except under licence. Englishmen were the chief culprits, and it is clear that alien merchants could also find willing collaborators; the case of Diego de Castro, a Spanish merchant who at Poole in 1486 forfeited silks and spices valued at £122. 2s. 6d. for attempted customs evasion, was by no means unique.⁵ Denizens were sometimes prepared to enter the goods of aliens under their own names in the Customers' books,⁶ an attempt to check this abuse being made by the statute 3 Hen. VII, c. 7. Though smugglers were usually of comparatively humble status eminent London merchants like Henry Cantlowe, Robert Redknappe, Thomas Awnsham and Roger Grene were also quite prepared to stoop to pick up a dishonest penny;⁷ a case in 1507 reveals that a number of Suffolk clothiers, including Thomas Spring of Lavenham, were in possession of smuggled alum to the value of £93. 6s. 8d.⁸ Inability to pay the duty was clearly not the crucial factor.

The government's concern at this state of affairs is shown by the appointment, during the reigns of Edward IV and Henry VII, of commissions of inquiry into

¹ 1 Hen. IV, c. 13; 4 Hen. IV, c. 20; 11 Hen. VI, c. 15; 11 Hen. VI, c. 16; 14 Hen. VI, c. 5; 15 Hen. VI, c. 8; 20 Hen. VI, c. 5; 28 Hen. VI, c. 5; 12 Ed. IV, c. 3; 3 Hen. VII, c. 7.

² S.P., Hen. VIII, vol. 113, fos. 129-40.

³ *Proceedings and ordinances of the privy council of England, 1386-1542*, ed. N. H. Nicholas (1837), vii, 60-1, 78.

⁴ A number of these cases for the reign of Henry VII are printed in H. J. Smit, *Bronnen tot de geschiedenis van den handel met Engeland, Schotland en Ierland* (The Hague, 1950), II, pt. I, nos. 21, 39, 40, 42, 43, 83, 157, 173, 176, etc. Though selected to illustrate trade relations with the Netherlands only, these cases are in other respects quite representative.

⁵ King's Remembrancer's Memoranda Rolls (K.R.M.R.), 1 Hen. VII, Hil., rot. 10; for similar cases see 18 Hen. VII, Hil., rot. 10; 19 Hen. VII, Easter, rot. 29; 21 Hen. VII, Hil., rot. 19. These and all subsequent references to the Memoranda Rolls relate to the 'Communia' section.

⁶ K.R.M.R. 14 Hen. VII, Trin., rot. 6; 15 Hen. VII, Mich., rot. 6.

⁷ K.R.M.R. 1 Hen. VII, Easter, rot. 5; 2 Hen. VII, Easter, rot. 11; 15 Hen. VII, Trin., rot. 2; 17 Hen. VII, Mich., rot. 6.

⁸ K.R.M.R. 23 Hen. VII, Mich., rot. 3.

the smuggling of wool and other goods on the Surrey coast,¹ in Devon,² and in the area around Chichester.³ In the years 1486–8 some twenty customs officials were prosecuted for absence from their posts, for illegally engaging in trade on their own account, and for embezzlement.⁴ The appointments of officials often stipulated residence, though in some cases it was permitted to put in a deputy, and it is doubtful whether many titular holders of office in the customs administration actually wrote their rolls 'with their own hands'.⁵ These efforts of the central government probably did have the effect, however, of frightening customs officials into greater efficiency than before.

All this evidence goes to show that the smuggling problem did exist in the early Tudor period, but the magnitude of the problem is another question. Preambles to statutes and the testimony of private individuals can easily be used to prove too much in an age when gross exaggeration was habitual. In Tudor England it never rained but it poured. Many towns, it seems, were in a state of quite extraordinary decay;⁶ the wearing of costly apparel was leading to robbery and extortion;⁷ the king was informed of the daily increase of murder, theft, robbery, the decay of husbandry 'and othir enormyties and inconveniencies'.⁸ A merchant complains of cloth which he purchased and dispatched to Portugal without inspection, and alleges not only that it was nearly burned by the indignant Portuguese, but that his factor narrowly escaped the same fate.⁹ A dissatisfied vintner claims that certain butts of malmesey were not merely of short measure, but further contained 'rotten corrupt & nawghty wynes hable to kyll as many men as shuld drynke of the same'.¹⁰ Indeed, most such complainants in Chancery were faced with their 'utter undoing for ever in this world' if the Chancellor should fail to issue the appropriate writ. Very few contemporary statements can be taken at their face value.

Taken as a whole the cases recorded in the Memoranda Rolls do not support the view that smuggling accounted for an appreciable part of England's foreign trade under Henry VII. The overwhelming majority of them concern goods valued at less than £20, and the sum total of all would still represent only an insignificant fraction of the legal trade of the reign. Cases of large-scale smuggling were rare, often proved unfounded after due investigation, and many were of a purely technical nature in which proceedings in the Exchequer Court were stopped by writ of Privy Seal.¹¹ Similarly, the prosecutions of customs officials seem to have produced very few convictions,¹² most of the accused being able to obtain writs of Privy Seal or pardons which explained or excused their absences and misdeeds.¹³ Whelpeley's startling revelations appear to have led

¹ K.R.M.R., 1 Hen. VII, Hil., rot. 20.

² K.R.M.R., 2 Hen. VII, Mich., rot. 37.

³ K.R.M.R., 2 Hen. VII, Mich., rot. 38; *Cal. Pat. Rolls, 1485–94*, p. 132.

⁴ K.R.M.R., 2 Hen. VII, Hil., rot. 3; 2 Hen. VII, Easter, rot. 3, 5, 11–12; 3 Hen. VII, Mich., rot. 19, 24, 27, etc.

⁵ *Cal. Pat. Rolls, 1485–94*, pp. 82–3; 1494–1509, p. 127, etc.

⁶ 4 Hen. VII, c. 19; 6 Hen. VIII, c. 5.

⁷ 6 Hen. VIII, c. 1.

⁸ *Cal. Pat. Rolls, 1485–94*, p. 434.

⁹ Early Chancery Proceedings 240/61.

¹⁰ *Ibid.* 672/4.

¹¹ This applies especially to cases under 3 Hen. VII, c. 7, where denizens had entered the goods of other denizens, or aliens those of other aliens, under their own names in the customers' books. Such prosecutions showed a misreading of the intention of the statute, and were stopped by 1 Hen. VIII, c. 5.

¹² Two were condemned to a fine of £100, but in each instance the case went by default (K.R.M.R., 3 Hen. VII, Mich., rot. 19, 24).

¹³ See, for example, K.R.M.R., 2 Hen. VII, Hil., rot. 3, 5, etc. Also *Cal. Pat. Rolls, 1494–1509*, pp. 171 and 585.

to no more than the dismissal of one very minor official in Essex. If the customs administration was as corrupt as he alleged, it was certainly skilful in concealing its evil-doing.

A bare possibility remains that collusion between merchants and officials was so close that most cases never reached the Exchequer Court at all, and that the lack of evidence is therefore proof of efficient smuggling rather than of its absence. But this is very improbable. It was in the direct interest of the officials to seize smuggled goods, since they normally received one half of the value of all such goods as were declared forfeit. The Searcher of London could probably reckon on a steady income of some £50 a year from forfeitures, with occasional windfalls running into hundreds of pounds.¹ And if officials were idle there were plenty of industrious informers to do their work for them. The merchants would have needed to bribe a considerable number of officials very heavily to ensure their collaboration, and to prevent any one from informing against the others.² It was hardly worth their while to do so. Trading companies like the Merchant Adventurers would not be willing to lose prestige and privilege by becoming involved in shady dealings, and it is not surprising to find that, officially at least, they discouraged such activities. Heavy fines were imposed in 1480 for false bills of custom, it having been found that certain merchants had 'forsworne them self to the grete disonour of the felishipp'.³ Members were subsequently enjoined to 'seke no newe wayes nor deceytes, wherby the Kynges good grace may be deceyved of his dutie, and the felishipp sclaundred & hurt'.⁴ The 'colouring' of aliens' goods was likewise discouraged.⁵ But the strongest argument against the existence of large-scale smuggling is that it would not pay. So long as the duty on cloth remained at about 2 per cent of its market value for denizens, and 6 per cent for aliens, and that on most other commodities at only 5 per cent of their declared or rated value, it was not worth the merchant's while to pay out bribes to customs officials, wages to accomplices, and run the risk of confiscation into the bargain. It would be cheaper and safer to trade through legal channels. The smuggling of wool, which paid a high rate of duty, and of commodities like corn, which could only be exported under licence, was perhaps more profitable. The revision of the Book of Rates under Mary, together

¹ E.g. £198. 10s. 9d. in 1499, and £433. 6s. 8d. in 1503 (K.R.M.R., 15 Hen. VII, Mich., rot. 6, and 18 Hen. VII, Hil., rot. 19). John Shaa, Searcher of London from 1492 to 1504, was no mere starving clerk, to be tempted by petty bribes, but a wealthy member of the Goldsmiths' Company who was knighted in 1497 and Mayor of London in 1501-2. That the zeal of Searchers might even prove excessive is shown by at least one case, when it was found after investigation that certain cloths had been improperly seized by one William Chynalles, 'entending by crafty and uniust meanes to entitle us to the seid goodis to thentente that he mought haue the moyte therof' (K.R.M.R., 12 Hen. VII, Easter, rot. 8).

² The legal emoluments of customs officials, though not on a generous scale and remaining fixed through the price revolution, were not negligible in the reign of Henry VII. John Dawtreys was appointed Customer and Overseer at Southampton with fees totalling £75; John Myllys as Surveyor at London with fees of £56 (*Cal. Pat. Rolls, 1494-1509*, pp. 256 and 465). In addition there were many semi-legal pickings to be had, which came under investigation under Henry VIII (Schanz, *op. cit.* II, 356-61, and S.P., Hen. VIII, vol. 113). Officials were not forced to take bribes in order to live. On the other hand, great fortunes were not to be made in the customs administration. An inquiry in 1496 into the possessions of Robert Fitzherbert, Collector of the Petty Custom in London, revealed his income from property in London and Hertfordshire to be only £10. 13s. 4d., and his movables to be worth only about £40. Clearly he had not found his office so lucrative as William Byrde was later to do (K.R.M.R., 11 Hen. VII, Trin., rot. 20. For Byrde see Ramsay, *loc. cit.* pp. 145-7).

³ *Acts of Court of the Mercers' Company, 1453-1527*, ed. L. Lyell and F. D. Watney (Cambridge, 1936), pp. 139-40.

⁴ *Ibid.* p. 253.

⁵ *Ibid.* p. 320.

with the imposition of heavier duties on cloth, increased the temptation.¹ But as regards the earlier period it seems safe to conclude that the smuggling trade, though on a sufficient scale to alarm a government whose administrative machinery was admittedly inadequate, did not represent more than a minute fraction of England's overseas trade. The Enrolled Accounts, therefore, record, after their fashion, almost the entire foreign trade of the reign of Henry VII.

Their fashion is not, unfortunately, that of a modern statistician. Their compilers had a purely fiscal end in view. Thus they contain no information on the direction of trade, and fail to make many distinctions which would be of use to the economic historian. Goods paying the same rate of duty, whether imported or exported, denizen-owned or alien-owned, are lumped together indiscriminately. The wine imports of denizens and aliens are only occasionally listed separately. In the case of goods paying the petty custom of 3*d.* in the pound it is unusual for any distinction to be made between goods owned by Hansards and those of other aliens.² No such distinction is ever made in the case of goods paying the subsidy of a shilling in the pound, and attempts to assess the proportions owned by denizens, Hansards and aliens respectively depend on a good deal of very rough estimation.³ For the reign of Henry VII the Enrolled Accounts give no data to determine the proportion of goods imported and exported, and this could only be done by a detailed analysis of the Particulars of Accounts.⁴ The Enrolled Accounts, except in the case of wool and cloth exports, give no more than an indication of the total volume of trade and the relative importance of the various ports.⁵ And even the figures themselves can be deceptive.

In the case of cloth exports we are fortunate in being able to distinguish the exports of denizens, Hansards and other aliens, but in other respects these figures are less satisfactory, and their apparent precision misleading. Ostensibly they relate to standard cloths of assize, twenty-four yards in length and two in breadth,⁶ but in fact this is not the case. For the sake of convenience other types of cloth—kerseys, dozens, etc.—were reckoned in terms of broadcloths for the purposes of customs assessment, and are inextricably confused with them in the Enrolled Accounts. Moreover, the standard broadcloth is in any case a convenient fiction, since in practice such cloths might be as much as forty yards in length, and probably very few conformed to the statutory specifications. It would be reassuring to know that a standard table of equivalents existed for

¹ This is reflected in the huge increase in the number of membranes in the K.R. Memoranda Rolls recording cases of smuggling, etc., from less than 100 a year under Henry VII to some 850 at the beginning of Elizabeth's reign. I am indebted for this information to the kindness of Mr N. J. Williams.

² At London this distinction is made for three years only in the reign of Henry VII, and these figures suggest that the ratio of goods owned by Hansards to goods owned by other aliens was about 60-40. In the case of the out-ports the distinction is so rarely made, and the figures fluctuate so greatly, that no reliable estimate can be made.

³ The method for arriving at such an estimate is given in Power and Postan, *op. cit.* pp. 6-9. It depends on a prior estimate of the ratio of Hanseatic to alien trade, and of the value of alien cloth exports. In view of note 2 above, and the illusory nature of any figure purporting to represent the price of the 'average' broadcloth, no such estimate is attempted here.

⁴ The accounts for London begin to distinguish between exports and imports paying the Petty Custom only after 1509. As for goods paying poundage, some rather fragmentary figures printed in Schanz, *op. cit.* II, 73, suggest that imports accounted for at least 80 per cent of the total in the reign of Henry VIII.

⁵ More detailed discussion of the value and interpretation of the Enrolled Accounts may be found in Power and Postan, *op. cit.* pp. 3-10, 321-30, and in Schanz, *op. cit.* II, 1-36.

⁶ 1 Ric. III, c. 8.

converting other cloths into broadcloths, and that the latter were reckoned strictly according to length—i.e. that three cloths each measuring forty yards in length appear as five cloths in the accounts. Unfortunately, it is clear from the ordinances of 1536 that no such uniform system was in operation, but that 'Euery merchaunt aswell denyzen as stranger dothe use to pak of euery Sort in one pack as many as he thynkes best for his profett & advantage Wherby the quantyte natur colour nor length ys not knowne', and that there was 'no good Concederacion nor diuersite Taken how many of one sort shalbe alowyd for a brod cloth'. A standard scale of equivalents was then laid down, apparently for the first time. In addition, a certain allowance seems to have been made for cloths used as wrappers, though once again the exact scale, if one existed, is not known.¹ Clearly there was very great diversity of practice, and the figures for cloth exports in the reign of Henry VII therefore represent only a rough assessment of all sorts of woollens exported, and are appreciably lower than the true totals.

Similarly, the figures purporting to represent the value of goods paying the Petty Custom and poundage fall short of the market values. It seems that before 1507 the customers were almost wholly dependent on the estimates of the merchants themselves, clearly interested parties. The new Book of Rates issued in that year (not necessarily the first), probably operated in London only, while the old system prevailed in the out-ports until 1536.² Perhaps the apparent rise in the value of goods paying the Petty Custom and poundage at London in the last two years of the reign reflects the influence of the new book, though it is clearly far from giving a complete list of commodities, still less of the full range of qualities,³ and a good deal must still have been left to the discretion of the customer. It was alleged in 1536 that the 'wares be of a highar valure now by the one half and more than they were in tymes past so that the kyng ys not nowe answard vid. of the pownd'.⁴ Even allowing for the usual rhetoric in this statement it is probably reasonable to add between 40–50 per cent to the figures as given to arrive at a rough estimate of the market value of the goods in question.⁵ If these qualifications are borne in mind, the tables derived from the Enrolled Accounts may be used to establish certain general conclusions.

In the first place it seems that the economic achievements of Henry VII's reign have been rather underrated. A period of steady, if unspectacular progress for the first two-thirds of the reign was followed by a marked boom which persisted into the reign of Henry VIII. Cloth exports averaged 50,878 in the first six years of the reign, 81,835 in the last six—an increase of 61 per cent in twenty-four years as compared with an increase of only 45 per cent in thirty-eight years for the following reign.⁶ The proportion exported by denizens,

¹ S.P., Hen. VIII, vol. 113. Regulations for the more orderly packing of cloth contain the phrase 'with ther wrappers alowyd', suggesting that the practice was already of long-standing, and well understood.

² N. S. B. Gras, *The Early English Customs System* (Cambridge, Mass., 1918), pp. 121–9.

³ Printed in Gras, *op. cit.* pp. 694–706.

⁴ S.P., Hen. VIII, vol. 113.

⁵ Schanz adds 50 per cent to the values given for the reign of Henry VIII. Schanz, *op. cit.* II, 34, n. 2.

⁶ A full table of six-yearly averages gives the following results:

Date	Value in £ of goods paying 3d. in the £	Cloths exported	Value in £ of goods paying poundage	Tuns of wine imported	Wool exported (sacks and fells)
1485–91	55,409	50,878	125,912	7,246	7,207
1491–97	63,605	57,646	142,492	8,260	7,434
1497–03	73,438	73,830	177,309	10,397	6,769
1503–09	92,878	81,835	226,003	10,661	5,074

Hansards and other aliens remained fairly constant—at about 53, 24 and 23 per cent respectively—the share of denizens increasing by only 2 per cent.¹ As against this remarkable boom in England's major export commodity the trade of the Staplers declined by 30 per cent over the same period, the export of wool being gradually killed off by heavy taxation and the demands of the cloth industry at home.² This decline was temporarily arrested in the first years of Henry VIII's reign, but thereafter the downward trend continued. Nevertheless, the rise in cloth exports far more than accounted for the reduced quantity of wool available for export,³ and represented moreover a substantial rise in the value of England's main exports.⁴

Imports during the reign show an even more marked rise. The value of goods paying the Petty Custom rose by 68 per cent; that of goods paying poundage by 80 per cent; imports of non-sweet wine increased by 47 per cent. The fact that imports were apparently increasing more rapidly than exports might seem to suggest that the balance of trade was becoming unfavourable. Since, however, Schanz's elaborate calculations show that the balance in the succeeding reign was still in fact favourable,⁵ the figures more probably reflect a shift in the terms of trade to England's advantage. On the other hand, the renewal of bullionist legislation and the passing of sumptuary laws in the new reign reflect governmental concern at the swelling flood of foreign imported wares.⁶

Comparison of the figures for London's trade with those for the country as a whole suggests at first sight that the capital's share in the commercial activity of England was on the decline.⁷ It is especially surprising to find that London's share in the total cloth exports of the country fell from 70 to 60 per cent, while her share in wine imports fell from 47 to 36 per cent and in goods paying poundage from 56 to 51 per cent. This apparent decline is, however, largely illusory, being mainly due to the exceptional boom in Southampton's trade in

¹ The tables do not seem to support the view that the much-vaunted commercial treaty with the Netherlands in 1496 (the *Magnus Intercursus*) had any very significant effect either on the total export of woollens or on the share of denizens in that export.

² For a comparative table of duties paid see Schanz, *op. cit.* II, 6.

³ Reckoning four cloths to the sack, the equivalent of 5,589 more sacks was exported in 1503-9 than in 1485-91, though this calculation excludes wool exports to the Mediterranean and those of the Newcastle guild of merchants.

⁴ A rise of £80,061, reckoning £6 as the price of a sack of wool, and £3 as the price of a broadcloth (cf. Schanz, *op. cit.* II, 31, n. 1 and 32, n. 2). The estimate of £3 as the standard price of a broadcloth, though open to serious objections, is on the whole confirmed by the fragmentary evidence of market prices to be found in the Early Chancery Proceedings and the K.R. Memoranda Rolls. It is also significant that the official rating of three kerseys, considered the equivalent of one broadcloth, was raised in 1505 from £2 to £3 (K.R.M.R., 21 Hen. VII, Mich., rot. 45).

⁵ Schanz, *op. cit.* II, 30-6.

⁶ 1 Hen. VIII, c. 13 and 14; 3 Hen. VIII, c. 1; 6 Hen. VIII, c. 1.

⁷ The following table gives the six-yearly averages for London's trade during the reign of Henry VII. The figures in brackets indicate the percentage of the totals for the whole kingdom:

Date	Value in £ of goods paying 3d. in the £	Cloths exported	Value in £ of goods paying poundage	Tuns of wine imported	Wool exported (sacks and fells)
1485-91	35,593 (64)	35,815 (70)	70,375 (56)	3,433 (47)	4,572 (63)
1491-97	39,869 (63)	37,406 (64)	78,563 (55)	3,404 (41)	5,026 (68)
1497-03	50,100 (68)	46,638 (64)	98,818 (56)	3,931 (38)	4,196 (62)
1503-09	67,693 (73)	49,067 (60)	115,791 (51)	3,857 (36)	3,491 (69)

the last few years of the reign.¹ This boom was not long sustained, and moreover we know that London merchants were responsible for a large part of the commercial activity of Southampton at this time.² The Enrolled Accounts, normally so bare of significant detail, supply in the case of Southampton the names of English merchants exporting wool to the Mediterranean. It is clear from this information that this trade was entirely monopolized by London merchants, most of them active in the affairs of the Merchant Adventurers. A study of the figures for the other out-ports, however, leads to a quite opposite conclusion. These shared in the general prosperity until about the turn of the century, but thereafter lost ground both relatively and absolutely. This is most marked in the case of the south-coast ports, which did not recover in the following reign, while the cloth exports of nearly all drop significantly after 1500.³ It is also noticeable that both Hansards and other aliens were more and more tending to concentrate their activities in the capital.⁴ This trend is, indeed, reflected in the rise of London's share in goods paying the Petty Custom from 64 to 73 per cent. After 1500 London had nothing to fear from the competition of the out-ports.

¹ The figures for Southampton's trade in the years 1500-9 read as follows:

Date	Value in £ of goods paying 3d. in the £	Cloths exported by		Value in £ of goods paying poundage	Tuns of wine imported	Sacks of wool exported to Mediterranean
		Denizens	Aliens			
1500-1	4,039	3,930	4,967	19,512	617	1,095
1501-2	3,887	1,490	5,715	23,577	703	1,183
1502-3	1,778	1,645	1,862	8,415	754	526
1503-4	10,981	1,195	8,139	30,623	637	1,219
1504-5	5,406	1,352	5,987	22,310	899	2,363
1505-6	7,851	1,311	12,378	45,958	691	1,425
1506-7	3,134	2,820	6,406	26,288	516	498
1507-8	6,612	1,697	16,070	57,568	464	1,616
1508-9	5,555	1,298	14,103	50,233	645	1,166

² A. A. Ruddock, 'London Capitalists and the decline of Southampton in the early Tudor period', *Econ. Hist. Rev.*, 2nd ser., II (1949), 137-51.

³ Bridgwater exported 974 cloths in 1500-1, and 682 cloths in 1501-2, goods paying poundage being valued at £2,837 and £3,352 respectively. In 1508-9 Bridgwater's cloth exports numbered 149, and goods paying poundage were valued at £1,712. At Exeter and Dartmouth the figures for the same three years were as follows—cloth exports: 8,385, 10,829 and 6,229; value of goods paying poundage: £15,965, £18,794 and £11,720. At Kingston-upon-Hull the figures for the same three years were—cloth exports: 2,579, 3,397 and 1,898; value of goods paying poundage: £6,157, £7,857 and £4,661. In each case 1501-2 was a peak year for cloth exports. At Bristol the peak year was 1495-6, when cloth exports numbered 8,594 and goods paying poundage were valued at £17,613; by the year 1508-9 the figures had fallen to 2,915 and £9,597. The trade of Sandwich began to decline even earlier; goods paying poundage there were valued at £15,787 in 1486-7, but had fallen to £5,312 by 1508-9. Ipswich, Lynn and Yarmouth all reached their peak in 1507-8 the figures for their cloth exports in that year being 2,455, 944 and 311 respectively, and the value of goods paying poundage £7,377, £3,887 and £6,147 respectively. But the year 1508-9 marked a slight decline in each case, cloth exports falling away to 2,645, 715 and 275 respectively, and the value of goods paying poundage falling away to £5,771, £3,091 and £5,234 respectively. In the reign of Henry VIII none of these three ports ever again attained the prosperity of the year 1507-8.

⁴ This is especially noticeable in the case of cloth exports. The Hansards had virtually ceased to export any cloths from Boston, Ipswich and Yarmouth by the end of the reign, and their average yearly exports from Kingston-upon-Hull were 620 in 1506-9 as against 895 in 1501-4. The Hansards exported 90 per cent of their cloths from London in 1485-91 and 96 per cent in 1503-9. As for other aliens, they exported only 144 cloths from Bristol in the four years 1505-9. At Exeter and Dartmouth their cloth exports averaged only 116 in 1506-9 as against 745 in 1490-3. At Plymouth and Fowey their cloth exports averaged 226 in 1485-9, and only 46 in 1505-9.

*A Table of the Enrolled Customs Accounts for the Reign of Henry VII
Consolidated Totals*

Date	Value in £ of alien goods paying Petty Custom of 3d. in the £	Broadcloths exported by			Total
		Denizens	Hansards	Aliens	
1485-86	50,849	33,562	14,591	8,951	57,104
1486-87	36,224	19,116	9,014	5,602	33,732
1487-88	49,849	17,650	14,370	15,283	47,303
1488-89	59,492	24,938	14,887	13,483	53,308
1489-90	82,892	34,115	15,765	8,277	58,157
1490-91	53,145	30,245	10,805	14,614	55,664
1491-92	74,717	29,059	14,923	10,562	54,544
1492-93	55,948	27,962	14,679	12,522	55,163
1493-94	65,230	29,964	17,637	11,910	59,511
1494-95	71,625	31,137	17,011	12,397	60,545
1495-96	60,966	31,815	16,886	9,697	58,398
1496-97	59,704	31,353	16,621	9,740	57,714
1497-98	57,797	34,803	16,910	10,395	62,108
1498-99	65,740	34,308	18,146	8,006	60,460
1499-1500	77,252	47,942	17,280	10,735	75,957
1500-01	76,908	48,779	17,230	16,100	82,109
1501-02	92,775	51,035	18,625	16,631	86,291
1502-03	70,155	48,166	16,472	11,416	76,054
1503-04	82,065	40,949	18,265	15,989	75,203
1504-05	79,924	35,941	17,536	14,638	68,115
1505-06	83,689	42,266	16,144	19,435	77,845
1506-07	96,279	47,820	19,223	16,211	83,254
1507-08	107,801	51,064	18,364	24,169	93,597
1508-09	108,109	48,782	19,720	24,493	92,995

All years run from Michaelmas to Michaelmas.

In order to compute the totals, gaps in the accounts have been made good by taking an average of the preceding and the succeeding years, or, where this was not possible, of either the two preceding years or the two succeeding years.

Date	Value in £ of goods paying poundage	Tunnage of non-sweet wine imported	Wool exported	
			Sacks (wool)	Sacks (fells)
1485-86	116,780	5,151	6,382	1,912
1486-87	119,773	5,948	7,375	1,990
1487-88	97,028	6,329	5,729	2,610
1488-89	128,990	10,495	4,801	2,182
1489-90	152,007	6,507	6,087	2,909
1490-91	140,896	9,048	1,141	123
1491-92	147,521	7,355	2,151	491
1492-93	140,779	10,164	3,782	1,256
1493-94	121,333	7,221	5,205	1,265
1494-95	167,437	8,556	8,090	2,352
1495-96	136,169	7,163	10,144	2,280
1496-97	141,710	9,101	5,370	2,221
1497-98	160,061	8,550	6,827	2,018
1498-99	141,136	11,175	3,785	2,081
1499-1500	170,375	10,904	4,468	1,789
1500-01	196,409	10,914	4,119	2,505
1501-02	207,327	10,626	5,723	1,651
1502-03	188,543	10,213	3,913	1,630
1503-04	198,644	11,174	2,895	1,207
1504-05	181,991	14,820	3,937	955
1505-06	212,059	12,335	2,287	656
1506-07	231,396	6,679	4,664	1,270
1507-08	278,960	8,708	4,710	1,511
1508-09	252,967	10,259	4,540	1,813

The figures in the last two columns relate to the exports of the Merchants of the Staple only.

In other respects the table presented here does not suggest any great modification to the established view of Tudor commercial history.¹ But it is hoped that it will be of value in supplying concrete data for the initial phase of the great expansion of England's foreign trade in the early sixteenth century, and that it will serve to draw attention to the economic achievements of a reign that has been unduly neglected for the more publicized triumphs of the following decades.

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¹ See especially F. J. Fisher, 'Commercial trends and policy in sixteenth-century England', *Econ. Hist. Rev.* x (1940), 95-117.

HAROLD ADAMS INNIS, 1894-1952—A MEMOIR

By ARTHUR H. COLE

QUITE appropriately economic historians who achieve the presidency of the American Economic Association are much more than economic historians. They are men of wide interests and stimulating minds. Such was Edwin F. Gay. Such was Harold Innis. Possibly it is no wonder that these two scholars were successive presidents of the [American] Economic History Association.

Perhaps in another environment Innis would have become an economic theorist. He surely possessed the intellectual capacity and imagination. In 1929 he went on record that 'the central position [in economics] must of course always be accorded to economic theory'; and he never really deviated from that belief. His scientific conversations were always illumined with the employment of theoretical concepts. He sought to utilize such concepts in the reorientation of economic history as in his essays on 'Liquidity preference as a factor in industrial development' or 'The concept of monopoly and civilizations'. Unlike many practitioners of history, Innis used facts not as ends in themselves but as the building stones of a theory or fruitful generalization.

One circumstance that drew Innis from a lifetime in theory was the accident of his nationality. He felt himself destined to devote his energies to a study of Canadian affairs. His doctoral thesis was upon a Canadian theme. And not many years after taking his degree—specifically in 1929—he had reached conclusions that shaped his subsequent career: 'An intelligent perspective is a prerequisite to the development of Canadian economics'; 'A new country presents certain definite problems which appear to be more or less insoluble from the standpoint of the application of economic theory as worked out in the older highly industrialized countries. Economic history consequently becomes more important as a tool by which the economic theory of the old countries can be amended'; and he counselled efforts toward 'the development of a philosophy of economic history', or the ultimate formulation of 'an economic theory suited to Canadian needs'.

Innis conceived the main themes of Canadian economics to be the exploitation of his country's natural resources by peoples and institutions of foreign origin, and the adjustment of Canadian activities to exigencies and forces of external derivation. Accordingly we find him studying with zeal and thoroughness the successively critical avenues of economic activity in Canada: the fur trade, the fisheries, wheat growing, lumber production, the frontier of mining, which, with his doctoral dissertation in the field of transportation, gave him a survey of all the basic historical trends in his country.

The appearance of Toynbee's *Study of History* and the discussions that revolved around that noteworthy book appear to have released Innis' mind—perhaps stimulated his mind—to a more intensive struggle with those 'major problems' of economic history of which he was always conscious. Previously, as at the time of his *Cod Fisheries*, 'the problems of empire' were those 'of constitutional as well as economic organization'; now Innis began to stress not only control over space but also control over time—'the length of time over which a [political] organization persists' as well as 'the territorial space brought within its control'.

He sought to accomplish these research ends in appreciable degree by the utilization of common economic concepts. The gist of Innis' *organon*—if I may so denominate what, after all, he regarded more as a hypothesis—has been well summarized by Professor Karl W. Deutsch in a review of Innis' *Bias of Communication*.

His thesis... is that patterns of communication channels and media are among the most crucial factors in historical evolution, social stability, and social change. Communication, as Professor Innis understands it, means the transmission of information through symbols carried by material media. In one of its aspects, transmission occurs in space, and its effectiveness over distance is of great importance in the expansion or decay of states, empires, and civilizations covering large areas; in another of its aspects, transmission must be through time, and its effectiveness—the effectiveness, in a sense, of social memory—is of the greatest importance in the persistence of traditions, governments, empires, and civilizations. Communication, in short, is the key both to expansion and stability, and the material media of communication such as paper, parchment, pens, telegraphs, and printing presses are the key to its performance. Civilization is swayed by communication which in turn is swayed by its technology. In studying this technology, we can discover the specific 'bias of communication' in each period, and with it at least one of the controlling forces in history.

Every technology of communication, the argument continues, gives rise to particular institutions of monopoly, but each such 'monopoly of knowledge' may give rise, in turn, to new techniques of communication designed to circumvent it. The result is a sequence of actions and reactions in the rise and fall of empires and cultures, where success leads to monopoly and monopoly to destruction, obsolescence, or stagnation, and where the failure of older media and institutions provides the opportunities for the rise of new ones, which may be bigger but not necessarily better than those that went before.

Within this schema lay many suggestions that Innis leaves for further exploitation by those of us who remain. One that he felt to be particularly significant for economists was what, as early as 1946, he spoke of as 'the concept of the dimension of time'. To him, time 'cannot be regarded as a straight line but as a series of curves depending in part on technological advances'. For instance, he remarks, 'interest theory would gain by an emphasis on the importance of elasticity in the concept of time. With technological advances in communication, the field for long-term securities tends to be narrowed in relation to the demand for short-term securities. The concepts of time and space must be made relative and elastic, and the attention given by social scientists to problems of space should be paralleled by attention to problems of time.'

Innis worked with a zest and fervour that was infectious. He drew to him younger men of similar interests, and impressed both university and governmental officials with his competence and objectivity. He became not only the leading spirit in economic history research and teaching in Canada, but also a leader and promoter of intellectual advance in all the social sciences there. Inevitably he was selected frequently to contribute to comparable problems south of the border—problems confronting the Committee on Research in Economic History or the Social Science Research Council. His stimulus, his critical appraisals, his judgement will long be missed in the States as well as in Canada.

ESSAYS IN BIBLIOGRAPHY AND CRITICISM

XXIV. MATERIALS FOR THE STUDY OF BARONIAL INCOMES IN FIFTEENTH-CENTURY ENGLAND

By C. D. ROSS AND T. B. PUGH

It was the need for further modern study of the late-medieval aristocracy which led Prof. Postan to affirm that 'In spite of the abundant documentary evidence, the social condition of the ruling classes is the most conspicuous gap in our historical knowledge'.¹ Today this comment has less justification than when it was made ten years ago, for in the past decade several aspects of the history of the landowning classes in England have been investigated.² Yet it remains true that we are still far from understanding the financial condition of the English baronage in the fifteenth century. It is curious that precise and reliable information about the incomes and finances of the magnates should be most lacking for the period when their share of political power and the work of government was greatest.

We cannot complain of lack of evidence, for, as Prof. Postan tells us, the materials are plentiful. Assessments of income for taxation, inquisitions post mortem, grants of land and wardship by the Crown, assignments of dower to widows, private accounts, and the series of Pipe Rolls and other records of the exchequer, have been used—though often as if all were equally reliable—to provide valuations of the more important baronies in medieval England. Together these sources present a considerable body of evidence, and there is a real need for a critical examination of the materials that exist for further work on this subject.

Taxation records, which at first sight might seem capable of yielding the exact and comprehensive information that we require, must be excluded from this survey: their shortcomings demand separate treatment and have been dealt with elsewhere.³ Our main aim is a limited one: to ascertain how far other sources can tell us what revenues a fifteenth-century English baron derived from land, and the charges, in the form of manorial reprises, wages and fees to officials and retainers, and the costs of administration which he had to meet. What we wish to know is the *net* income or 'expendable surplus' at the lord's disposal to maintain his social rank and buttress his political and territorial influence.

¹ M. M. Postan, 'Some Social Consequences of the Hundred Years' War', *Econ. Hist. Rev.* xii (1942), 11.

² Notably by M. M. Postan, *loc. cit.* and 'Some Economic Evidence of Declining Population in the later Middle Ages', *Econ. Hist. Rev.* 2nd ser., II (1950), 221-46; K. B. McFarlane, 'Bastard Feudalism', *Bull. Inst. Hist. Research*, xx (1945), 161-80; 'Parliament and Bastard Feudalism', *Trans. Roy. Hist. Soc.*, 4th ser., xxvi (1944), 52-79; J. S. Roskell, 'The Social Composition of the Commons in a fifteenth-century parliament', *Bull. Inst. Hist. Research*, xxiv (1951), 152-72; and S. Painter, *Studies in the History of the English Feudal Barony* (Baltimore, 1943).

³ For a study of the returns to the subsidy of 1436, see H. L. Gray, 'Incomes from Land in England in 1436', *Eng. Hist. Rev.* xlix (1934), 607-39. Also T. B. Pugh and C. D. Ross, 'The English Baronage and the Income Tax of 1436', *Bull. Inst. Hist. Research*, xxvi (1953), 1-28.

The great series of records accumulated by the Crown in direct connexion with its ancient feudal rights may be taken as a starting-point. The king's exercise of his rights of wardship, marriage and escheat over the tenants-in-chief led to the compilation of two main types of record: the inquisitions post mortem (with which may be included assignments of dower to widows of tenants-in-chief, based on the inquisitions), and the escheators' accounts of lands taken into the king's hands during the minority of the heir or as a result of confiscation. These last may be disregarded for our present purpose, for lands were very rarely retained in the direct administration of the escheator for so long a period as a year, and accounts of moneys received by the escheator over shorter periods are no reliable indication of the *annual* yield of the estates. It is also not uncommon to find that the escheator's account is itself based on the inquisition post mortem; the escheator admitted liability less for sums actually received from the issues of lands while in his keeping than for what he ought to have received *iuxta ratam extente*.¹

At first sight the inquisitions post mortem may appear to offer a fruitful source of investigation. Now preserved in two great series among the records of the chancery and exchequer in the Public Record Office, they are both numerous and voluminous. This bulk is, however, deceptive. Many inquisitions are missing, either in whole or in part, and it is uncommon to find a series of returns for the estates of a large landowner which is both complete and legible. In the defective state in which they survive, they will usually give us valuations of only some of the deceased tenant-in-chief's manors and lordships, and the reliability of these figures needs careful consideration.

The administrative purpose for which the inquisitions post mortem were compiled—to provide a record of all properties held by a tenant-in-chief on the day of his death, of whom they were held, and by what tenure—demanded also an extent or valuation of the deceased's lands, county by county.² The escheator, as the officer directed to make the returns under the writs of *diem clausit extremum* sent out on the death of a tenant-in-chief, was required to seek the aid of a sworn jury of local men in compiling his return. But jurors often confessed to ignorance as to essential facts and there is no reason to assume that they were likely to be well-informed about the financial condition of the private estates in their county. It is tempting to think that the escheator got his financial information from the family or officials of the deceased landowner, or was permitted access to private records, such as manorial compoti or extents.³ If this were so there might be

¹ E.g. in 1430–1, the escheator in Yorkshire accounted, among other properties, for the manor of Harom, which had belonged to Thomas, Lord Roos (d. 1430), and had been valued in the inquisition post mortem made in that year at £26. 2s. 5d. For the 20 days during which the manor was in his keeping the escheator rendered 28s. 9d. *iuxta ratam extente predictae*. For a garden worth 1s. p. a., the escheator paid 3d. for a period of 80 days. P.R.O. Escheators' Accounts, E. 136/59/4, 5.

² It is unfortunate that when the Public Record Office series of printed calendars of inquisitions post mortem was begun in 1905, a decision was made to follow the example of the Record Commissioners (*Calendarium Inquisitionum post mortem sive escaetorum*, 4 vols., 1806–28) in omitting all valuations. This decision misled the late E. R. Stevenson (*The English Government at Work*, 1327–36, ed. W. A. Morris and J. R. Strayer (Cambridge, Mass., 1947), II, 135) into affirming 'The inquisition post mortem did not determine the value of the estate' and into drawing an artificial distinction between inquisitions and extents.

³ It may be noted that it was not uncommon for the heir to produce evidence of *title* as a necessary preliminary to suing the lands out of the king's hand, and it was clearly in the heir's interest to secure a speedy return and to assist the escheator by supplying him with information, but there is no evidence whether this same procedure was followed with financial documents.

grounds for believing that the inquisition post mortem constituted a true financial record. But either alternative remains hypothetical, and would be difficult to prove. Some escheators may have taken pains to compile an accurate valuation, but in general we cannot be confident that the information at the escheator's disposal was either full or precise.

A more serious and less speculative disadvantage of the inquisition post mortem as a dependable financial record derives from the difficulties inherent in the process of valuing property by means of an extent, which generally underlies the estimates of value given in an inquisition.¹ An *extent* may be defined as an estimate of anticipated revenue from land in years to come, made on the basis of its revenue at the time at which the extent was compiled. But manorial revenue was not a static income; it was liable to considerable fluctuations. In part, manorial profits came from casual or varying revenue—such as the sale of timber or the profits of quarries—which are not susceptible to annual valuation. We may cite, by way of illustration, the Devonshire manor of Charleton, which belonged in 1439 to Richard Beauchamp, Earl of Warwick. There the Earl had a number of quarries of roofing stone; according to his inquisition post mortem of 1439, the profits of the manor were put at £21. 11s., exclusive of the profits of the stone quarries, which sold (the jurors said) at the rate of 20s. per 1000 tiles in a normal year.² By comparison, a private valor, compiled at the same date, gives the profits of the manor in the year of account as £52. 15s. 4d., of which £13. 19s. was derived from the stone quarries.³

Nor can we be sure that more permanent and usual sources of manorial income are accurately valued in inquisitions post mortem. Although by the fifteenth century much manorial revenue had come to consist of fixed rents, profits such as the perquisites of courts might be liable to fluctuation, and may also be substantially undervalued in the inquisition post mortem. Taken together, such shortcomings may mean that the extent provides no true indication of the full value of a manor, and comparison with private accounts generally confirms this point, as the following table of figures for some manors of the Earl of Warwick in 1439 will illustrate:

	Inquisition post mortem			Valor		
	£	s.	d.	£	s.	d.
Flamstead, Herts	10	0	0	13	6	8
Patingham, Staffs	10	6	8	29	9	1½
Preston and Uppingham, Rutland	20	0	0	26	4	5¼
Olney, Bucks	40	0	0	44	11	0
Hanslope, Bucks	50	0	0	70	2	0

¹ Many inquisitions give detailed information about manorial profits: the main sources of manorial revenue (such as the farm of the demesne land, the profits of meadows and mills, perquisites of courts, pannage, sale of underwood, and fishery rights) are separately valued, and the valuations appear to be based on some process of extent. But others are less detailed, especially when the Crown had little direct interest in the properties; a seemingly arbitrary valuation, often a suspiciously round sum, is given for the manor as a whole in the form *dictum manerium valet x li. per annum ultra reprisas*. The distinction between the detailed and the summary inquisition may be appreciated by reference to one of the many printed volumes issued by local record societies.

² P.R.O., Exchequer Inquisitions Post Mortem, ser. II, E. 149/165/1.

³ P.R.O., Rentals and Surveys, S.C. 11/18/46.

The extent may be considered reliable as a guide to manorial profits only when the Crown had a direct financial interest in securing an accurate return.¹

We have so far considered inquisitions post mortem as evidence for *total* profits from land. Our concern, however, is with their value as indications of *net* profits. Here again the extent is open to similar criticism. Charges and reprises varied perhaps more considerably than receipts, especially where they involved labour costs, which were rising steadily as the century grew older. Costs of maintenance of houses, mills and millponds, parks and hedges, might fluctuate considerably, and could not be adequately assessed in an extent. The only reprises allowed for in extents are fixed annual sums such as the wages of a reeve, the traditional reward of a parker, or the fee of a steward of the court, which generally constituted a very small part of manorial reprises. The 'value beyond reprises' to be extracted from an inquisition is not, therefore, comparable with the 'clear value' revealed by a private account, which includes both revenue and charges that the inquisition largely neglects.

Further difficulties arise when we turn from inquisitions post mortem considered as a guide to the profits of individual manors to their usefulness for calculating the total income of a private landowner's estate. In making his return, the escheator was required to value only those estates actually taken into the king's hand by him under the writ of *diem clausit extremum*, that is, lands of which the tenant-in-chief was sole seised on the day of his death. It was not usually his concern (although a painstaking escheator might occasionally undertake it) to value lands held jointly by the deceased with his wife or other persons, since these did not pass into the king's wardship. Thus, when Richard, Earl of Warwick, died in 1439, the great Despenser estates of his second wife, Isabel, were not valued in his inquisition, because they were held by him jointly with Isabel, who survived him.²

For the same reason, lands held by trustees of the deceased under an enfeoffment of use might remain unvalued. No less than seventeen of the ninety-five manors of Isabel Despenser, Countess of Warwick, were not valued in the return made after her death because they were in the hands of her trustees.³ When that shrewd and immensely rich widow, Joan Beauchamp, Lady of Abergavenny, died in 1435, the inquisitions post mortem that were taken recorded only about half of the remarkable accumulation of landed property which she had held by various titles. Escheators in eighteen English counties and the March of Wales were able to list three castles, thirty-six manors, with parts of others, and various rents and smaller parcels of land, all held by Lady Joan in her own name.⁴ But these inquisitions ignored altogether the town, castle, and lordship of Grosmont, in the March of Wales, which she held for life of the grant of King Henry IV; her portion of five manors in Essex, which she

¹ For example, when Richard, Lord Scrope of Bolton died in 1420, three commissioners were ordered in October 1420, to take his lands into the king's hands, and to return an inquisition. Of the North Riding estates of Lord Scrope, four manors were valued in this return at £8, £6, £9 and £30 respectively. The government was not satisfied with this return, and the escheator was ordered to make a detailed extent of the properties, which valued these same manors at £8. 14s., £8. 17s., £15. 14s. 6d. and £33. 8s. respectively. (*Yorkshire Inquisitions, Henry IV-Henry V*, Yorks. Arch. Soc., Record Series, vol. LIX (1918), 166-70.) The value of the whole group of estates, estimated at £250. 5s. 4d. in the escheator's extent, amounted only to £218 in the inquisition post mortem.

² P.R.O., Exchequer Inquisitions Post Mortem, ser. II, E. 149/165/1; Chancery Inquisitions Post Mortem, 17 Henry VI, no. 54.

³ Chancery Inquisitions Post Mortem, 18 Henry VI, no. 3.

⁴ Chancery Inquisitions Post Mortem, 14 Henry VI, no. 35.

had settled on trustees in 1428; a dozen manors in Gloucestershire, Wiltshire, Dorset and Kent, which had been conveyed to her for life by John, Earl of Arundel (d. 1421) and were held by feoffees in her interest; and over a score of manors in nine counties, which the old dowager had bought up during her widowhood.¹ The reputation for great wealth that the Lady of Abergavenny enjoyed is well attested by a valor of her English lands in 1427-8; for, excluding her manor of Rochford in Essex, they were worth to her, in clear value, after all charges and reprises had been met, a total of £1,984.² No doubt a large part of her revenues came from lands not listed at all in her inquisitions post mortem. In a century when jointures and enfeoffments of use—these last designed specifically to evade the seizure of private property into the king's hand on the lord's death—were becoming increasingly common, their exclusion from the escheator's return might often mean that a considerable proportion of a private landowner's estates was not valued in an inquisition post mortem.

We have emphasized the considerable limitations of inquisitions post mortem because these extents are the basis for two other sources of evidence: dower assignments to widows of tenants-in-chief, and grants of the farm of royal wardships during the minority of the heir. Frequently the Close Rolls give the dower assigned to baronial widows, often with valuations of these properties. In these the widow's share was commonly assessed on the basis of the inquisitions returned on the death of her husband. Enrolments of dower merely repeat the information available in the original inquisitions.

By the fifteenth century, wardships pertaining to the Crown, whether great or small, were almost invariably farmed for a fixed sum rendered annually. This was the reverse of exchequer practice with regard to wardships in the early years of Edward III's reign, when important custodies were usually committed to keepers who accounted in detail for the issues.³ When the terms on which the custody was to be held were fixed in a bargain between the grantee and the treasurer, much probably depended on the measure of political influence possessed by the grantee. Thus when Henry IV's half-brother, John Beaufort, Earl of Somerset, died in 1410, the widowed Countess Margaret was given the farm of all the lands of the earldom that remained after the assignment of her dower, rendering only the sum of £119. 17s. at which these estates had been extended in the inquisitions post mortem. Even this farm was remitted altogether in 1412, when the Dowager Countess of Somerset married the king's second son, Thomas, Duke of Clarence.⁴ Usually the basis for determining the farm of baronial estates in the king's wardship was the extent of the lands as returned in the inquisitions post mortem made by the escheators. Some margin of profit, greater or less, to the farmer is implied in the granting of estates in royal wardship to be held on these terms, and the farms rendered will not indicate the full income from the properties of the late tenant-in-chief.⁵

¹ *Cal. Close Rolls, 1409-13*, p. 144; 1419-22, pp. 86-90, 156, 167-8, 176, 183; *Cal. Patent Rolls, 1416-22*, pp. 305-6; 1422-29, p. 486; *Cal. Fine Rolls, 1430-37*, pp. 255, 293, 315.

² P.R.O., Rentals and Surveys, S.C. 11/25.

³ See W. O. Ault's chapter, 'Manors and Temporalities', in *The English Government at Work, 1327-1336* (ed. J. F. Willard, W. A. Morris and W. H. Dunham, Jr. (Cambridge, Mass., 1950)), III, esp. pp. 19-20, for the practice of farming minor wardships to keepers who rendered fixed rents 'based upon extents specially made by exchequer officials'.

⁴ *Cal. Fine Rolls, 1405-13*, pp. 185-213; *Cal. Patent Rolls, 1408-13*, pp. 422-3.

⁵ In 1421-2, the earldom of Devon and the barony of Roos were, at first, placed in the hands of keepers who were expected to account to the exchequer for all the rents, profits and issues that they handled. Possibly the financial problems raised by the French war explain a return to the earlier and more stringent exchequer practice in these matters; but within a few years, the direct

From royal financial records we may turn to the private accounts of baronial families. The student of family history in the later Middle Ages may—if he is so fortunate—encounter two types of financial record which have a special relevance to private income and expenditure. With these—the accounts of receivers-general and valors—we shall deal in turn.

The position of the receiver-general as the chief financial officer of the private estate-system was well established by 1350. By that date, as Tout put it, he held 'an overwhelming position' in the 'subordinate royal and baronial households of the period'.¹ Unfortunately, the accounts of these officials have seldom survived in any considerable numbers. Those best preserved are the full series for the 'subordinate royal' household of the Duchy of Lancaster, and these may be considered first.

By contrast with the royal exchequer administration, baronial arrangements were 'rooted in manorial usage', remarked J. F. Baldwin of the Duchy of Lancaster fiscal system.² The accounts of the Duchy's receiver-general were made up by the same method as those of the manors, and all current income, expenditure and disbursements to the lord's central officials and to his household officers are duly recorded.

The accounts of the receiver-general do not, however, provide in themselves a complete picture of Duchy finance. The organization of the Duchy estates into a series of honours, each under the control of a separate receiver, meant that the local receiver administered the finances of his own honour, and the receiver-general answered to his lord only for what he did with the surplus profits of the honours paid over to him by the local receivers. The 'expendable surplus' from each manor, and payments of a variety of charges—annuities, pensions, building expenses and the wages of honorial officials—were recorded on the local receiver's accounts. For a full understanding of the financial condition of the Duchy in any given year, the accounts of the receiver-general and of the local receivers must be used together: they are complementary.³

How far these administrative arrangements were reproduced or imitated on other private estates is something of a problem. Both the Beauchamp and Stafford families maintained separate receiverships for the management of their Welsh estates, and for outlying lordships in England, especially in the far west and north, but the manorial officials on estates in southern and central England accounted directly to the lord's receiver-general.⁴ The local receivers usually

management of the two wardships had been abandoned and the estates were farmed for fixed annual sums in the usual way. (*Cal. Fine Rolls, 1413-22*, pp. 438-9; *1422-30*, pp. 34, 62-3, 77-8, 102-3.) In general, the exchequer did not attempt to extract the full value of wardships, and the receipts from lands in royal custody, recorded on the Pipe Rolls, which form so valuable a source of information for the annual value of many English baronies in the early Middle Ages, are consequently of little use for the fifteenth century.

¹ T. F. Tout, *Chapters in Medieval Administrative History* (Manchester, 1928), iv, 260.

² J. F. Baldwin, 'Household Administration of Henry de Lacy and Thomas of Lancaster', *Eng. Hist. Rev.* XLII (1927), 185.

³ The Duchy of Lancaster Receivers' General Accounts in the Public Record Office (now classified as D.L. 28) are listed with other Duchy records in P.R.O., Lists and Indexes, vol. xiv. The Receivers' Accounts (D.L. 29) have been removed, along with most of the Duchy valors, to the 'Special Collection', Ministers' Accounts. (P.R.O. Lists and Indexes, vol. v.)

⁴ Humphrey Stafford, Duke of Buckingham (d. 1460) maintained nine such receiverships, of which four were in Wales, one in Cornwall and one in Holderness. Only two of these appear to have accounted to the receiver-general in 29-30 Henry VI. (Account of John Heton, receiver-general to the Duke of Buckingham, 29-30 Henry VI, P.R.O., Ministers' Accounts, S.C. 6/1305/4). Richard, Earl of Warwick had receivers in co. Durham for his lordship of Castle Barnard, in Pain's Castle in the Welsh March, in Cornwall and in Devon; and, after his second

accounted to the receiver-general, although for information as to local charges and reprises, and pensions and annuities paid locally, recourse must be had to individual receiver's accounts, of which, it seems, few have survived.¹ But on the Beauchamp estates, at least, there is evidence that not all local receivers were under the control and supervision of the receiver-general. The receiver appointed by Richard Beauchamp, Earl of Warwick, to manage the Lisle inheritance of his first wife, Elizabeth Berkeley, paid to the Earl's receiver-general in 1420-21 only half of his net receipts, the remainder (as we know from a surviving household account book) being paid directly to the keeper of the Countess of Warwick's household.²

This example may serve to show the dangers of assuming that the account of a private receiver-general is necessarily a reliable guide to the overall financial condition of his master's estates. Private arrangements differed widely because they were dictated by private convenience. The accounts of some receivers-general are more informative than others. Those of the Hungerford family, for example, are little more than lists of moneys received from the manorial officials by the receiver general.³ We cannot be sure whether the lump sum paid by each reeve or bailiff constituted the whole of his receipts, or whether he had already made disbursements on behalf of the lord. Nor do these accounts of the receivers-general contain any full statement of expenditure; we are not told, for example, how much Lord Hungerford spent on fees and annuities payable to his retainers. After careful study of the accounts, Mr J. L. Kirby concluded that 'no estimate of the total revenue of any member of the family at any given time can be attempted, and still less can expenditure be accounted for'.⁴

On the larger and wealthier Beauchamp estates, the Earl of Warwick's receiver-general kept a fuller record of the money handled by the reeves and bailiffs. If the manorial official had made payments to the lord's chamberlain, or to the keeper of the lord's household, or to one of the lord's creditors, he was required to produce the warrant, bill or tally which testified to his having done so, and the details of his transaction were entered on the receiver-general's account. An unusually full expenses section provides a complete analysis of the Earl's expenditure, which enables us to determine what part of his income was devoted to the upkeep of his household, to building expenses, and to the payment of wages and annuities. But we have already noted that even on the well-organized Beauchamp estates, not all the local receivers accounted with the receiver-general, and his account does not provide a full indication of his master's income from land.

We may see an illustration of the improved technique of estate management

marriage to the Despenser heiress, in Glamorgan and Morgannock and elsewhere in the March of Wales. (Account of the receiver-general of the Earl of Warwick, 3-9 Henry V, at Longleat House, MSS. of the Marquis of Bath; Account of the same, 1 Henry VI, at Warwick Castle, MSS. of the Earl of Warwick.) A similar organization of receiverships on his Welsh estates is indicated in the valor of Richard, Duke of York's Welsh lands for 21-2 Henry VI (P.R.O., Rentals and Surveys, S.C. 11/818).

¹ Some Stafford accounts are mentioned in *Hist. MSS. Comm.*, 10th Report, App. iv, pp. 155-6.

² Household Account Book of Elizabeth, Countess of Warwick, at Longleat House. We are indebted to the Marquis of Bath and the Earl of Warwick for permission to consult the accounts cited here and above.

³ Account rolls of the receivers-general of the Hungerford family survive in unusual numbers: there are nine, for the period 1420-75, in the Public Record Office. (Ministers' Accounts, S.C. 6/971, nos. 8-16.)

⁴ In his unpublished University of London M.A. thesis on *The Hungerford Family in the Later Middle Ages* (1939), p. 131.

in later medieval England in the development, on certain of the greater private estates, of a new type of financial record—the valor—designed to meet the need for a full analysis of the sources and character of private income and the extent and permanency of the charges laid upon it. The valor was expressly designed to provide a balance sheet which might serve as a guide to future income and provide a check on the honesty of the lord's officials. The word 'valor' was used by contemporaries to describe documents which vary widely in size and form, but which have certain distinctive features in common.¹ The valor was a summarized digest of all the estate accounts for one year produced by the lord's auditors. In essence, the valor is an auditor's report on the lord's revenue.

Some attempt to 'change the basis of the account from an estimate of the liability of the accounting official to an estimate of yearly profit and loss' was noticed by Mr Denholm Young as a feature of the administration of certain great lay estates in the time of Edward I.² But the development of the valor as a regular feature of private financial systems may probably be traced to the skilled officials of the Duchy of Lancaster in the latter part of the fourteenth century.³ After the union of the Duchy with the Crown in 1399, the production of an annual valor for each auditorial circuit of the Duchy became accepted practice. The form of the Duchy valors was established early in the reign of Henry IV, and continued substantially unchanged until the end of the Lancastrian period. This splendid series, which surpasses contemporary royal records in handwriting and arrangement, has survived essentially intact, and since these valors form the only full series known to us, some consideration of their nature and content will be of relevance here.

The Duchy valor presents in convenient form an analysis of the manorial compoti for each of the Duchy manors. At the end of the manorial accounts for each honour or lordship, a statement of its financial position is set forth. This includes payments by the local receiver, in the form of annuities, building expenses, or other expenditure authorized by letters of warrant, listed under the heading of 'foreign payments'. Similar final statements are compiled at the end of each valor for the auditorial circuit as a whole, in which receipts from arrears and casual revenue and the outlays were classified and totalled. On occasion, short digests of these final summaries from each auditorial circuit were abstracted and incorporated into a brief document known as a *conclusion des values*, wherein easy reference could be made to the financial position of the whole Duchy.

Few valors for private estates in the fifteenth century now survive. They exist only for magnate estates; as might be expected, they vary considerably in form and content, but their essential purpose remains the same. An incomplete valor of the estates of Richard Beauchamp, Earl of Warwick, for 1439, differs from the Duchy valors in that it merely records a lump sum for each manor;

¹ Valors are sometimes, and incorrectly, described as rentals. A rental, however, is clearly distinguished from a valor in contemporary usage. The rental was akin to an extent in that it provided a list of fixed rents used as a check-list in the compilation of manorial accounts. Once made it might be used for long periods of years; e.g. on the Duchy of Lancaster manor of Tanshelf, in the West Riding of Yorkshire, the reeve's account for 17-18 Edward IV (1477-8) lists rents of assize according to a 'new rental' made in the 8th year of Henry V (1420-1) before the steward of the Honour of Pontefract and the auditor. (P.R.O., Ministers' Accounts, Duchy of Lancaster, D.L. 29/511/8261.)

² N. Denholm Young, *Seigniorial Administration in England* (Oxford, 1937), pp. 130 ff.

³ R. Somerville, *History of the Duchy of Lancaster* (1953), I, 74-80, 87-8, 91-2, 107-9, where a full account of the development of the Duchy financial system may be found.

but it takes notice of sums received from casual or irregular sources of income, such as the sale of timber, or where unusual charges are incurred for building or maintenance repairs.¹

Similar information may be extracted from a small group of surviving valors for the estates of the Stafford family. The fine French valor of all the English lands of Anne, Countess of Stafford (exclusive of the lordship of Holderness), for 1435-6, is clearly the product of a highly-organized and efficient system of estate management.² It follows closely the pattern of the Duchy of Lancaster valors, with a full account of manorial income and reprises; an analysis of income and expenditure for each county or each group of counties, or even separately for an important lordship, such as that of Kimbolton in Huntingdonshire; and a similar analysis for the estates as a whole on the final membrane. There is a statement of clear value, with the sum paid to the Countess by the receiver-general and the balance of issues remaining in the hands of the ministers. For the estates of the Countess of Stafford's son, Humphrey, Duke of Buckingham, in 1447-8, a Latin valor has survived among the MSS. of the Marquis of Bath at Longleat House.³ It differs in some respects from the Countess Anne's valor: there are fewer details of manorial reprises, but for those lordships or groups of counties where a receiver accounted separately some details are recorded of the sums he expended from the balance of the manorial profits. On the dorse of the roll, this information is supplemented by full lists of the Duke's annuitants, ministers and officials together with the sums received by each.

Despite differences of form and arrangement, most private valors which have come to our notice share with the valors of the Duchy of Lancaster the inestimable advantage of providing their reader with a full guide to the sources and character of private income from land.⁴ Complete information as to the gross and net annual value of each manor and lordship, and of the whole estate to its owner, the costs of administration, and the drain upon landed income caused by retainers and dependants of the lord, can be obtained only from the valor, where it exists, although much useful information on the financial condition of a private estate is to be discovered from the account of a receiver-general. The greater usefulness of the valor derives from the administrative necessities of enormous and scattered estates: the information which the landowner sought coincides with the facts the modern student wants to know. It is the more regrettable that so few private accounts of this kind have apparently survived into our own day.

It is not our present concern to set forth such conclusions as may be drawn from the study of private accounts concerning the position of the later medieval aristocracy; an analysis of this kind demands separate treatment. A few examples must suffice to underline the value of these records to the historian. A valor of

¹ P.R.O., Rentals and Surveys, S.C. 12/18/45.

² P.R.O., Rentals and Surveys, S.C. 11/816. It is the sole survivor of what was probably a series of valors of the lands of the Countess Anne.

³ Longleat MS. 6410. In its present form this MS. appears to be incomplete, since it lacks the final statement or *conclusio valoris*.

⁴ Some private valors, such as the brief paper valor of the estates of the Earl of Warwick bound up with the account of his inner household for 1420-1, now at Longleat House, more closely resemble the *conclusio valoris* of the Duchy of Lancaster than the detailed auditorial documents described above. The valor of the estates in England of Joan Beauchamp, Lady of Abergavenny, for the year ending Michaelmas 1426 (P.R.O., Rentals and Surveys, S.C. 11/25) consists of a statement of their clear value, a list of retainers and their annuities, and a note of the sums in cash paid to the Lady by her two principal receivers.

the Welsh estates of the pretender, Richard, Duke of York, for 1441-2¹ serves, for instance, to emphasize the vast influence which he (in common with a few other great magnates) could exercise in the March of Wales, for his cash receipts from these estates exceeded the profits which King Henry VI drew from his royal Duchy of Lancaster in the year 1436-7.² Private accounts are similarly revealing as to private expenditure. The account of the receiver-general of Richard Beauchamp, Earl of Warwick, for 1420-1 shows that the Earl's expenditure in that year was almost double his income of £3,000; but it is telling evidence against the view that the later medieval lord was encumbered by an inflated and excessive wages bill to discover that the Earl spent less than £200 on annuities and the wages of officials, and more than four times that amount on his building schemes. Even in the troubled years in the middle of the century, Humphrey Stafford, Duke of Buckingham, one of the richest landowners of the day, did not consider it necessary to devote more than one-sixth of his income to the payment of his affinity.

A shortage of similar information still remains one of the main barriers to a proper understanding of the fifteenth-century English baronage. A fuller study of such private accounts as have successfully defied destruction may go far towards clearing away many of the misconceptions still entertained about the later medieval aristocracy. Private accounts, although few in number, have much to tell us about the economic and social position of the ruling classes in fifteenth-century England.

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¹ P.R.O., Rentals and Surveys, S.C. 11/818.

² The net profits of all the lordships and manors listed in the valor was £4,195: but £402. 6s. 7½d. of this sum consisted of receipts from lands in the English counties of Shropshire, Stafford and Hereford, which were not part of a Marcher lordship. After expenditure on wages, annuities and repairs had been met, the cash profits to the Duke amounted to £3,430. In 1436-7 the gross yield of the Duchy of Lancaster, according to the valors, was £4,743. 19s. 11½d., and the net profits, after deduction for wages, annuities and building expenses, amounted to £2,848. 2s. 4d. (P.R.O., D.L. 43/15/13). It should be noted that many Duchy properties were at this time in the hands of Henry V's feoffees (Somerville, *op. cit.* pp. 199 ff.).

XXV. ENGLISH PROVINCIAL CITIES

By S. G. CHECKLAND

A SURVEY of the available general histories of the great English cities is discouraging. Most civic reference librarians will provide a bibliography of the works available, and generously afford all the facilities in their power for the pursuit of such inquiries. But the lists, in spite of their brave faces, are poor. Manchester exhausts the category of standard histories with *A Short History of Manchester and Salford*, 2nd ed., 1927. Leeds offers only one modest general attempt, published nearly a quarter of a century ago. Sheffield though now provided with a reasonable little history, as late as 1949 relied in the main upon the *British Association Handbook* of 1910. The best treatment of Bristol in the present century is intended as a simple introduction. Hull produced a 'short history' in the 1890's. Liverpool has nothing later than Ramsay Muir's *History* of 1907; prior to this there is Picton's focusless miscellany of 1903. For the rest, most cities offer a number of studies of special aspects, along with a miscellaneous collection of 'Annals', 'Memorials', 'Fragments', 'Reminiscences', 'Hints', 'Relics', and the like.

In the midst of this rather dismal picture there now appears a full-dress *History of Birmingham*¹ undertaken by two established historians, commissioned by the City Council. The performance of its authors is such as to challenge English historians, educationists, and city fathers to consider whether justice is being done in this important field.

Fortunately the general approach does not exhaust the story. The history of provincial cities has been illuminated by both academics and non-professionals who, though not taking the city itself as the centre of their study, have yet thrown strong light upon it. The Victoria County Histories are monuments to collaboration between these two kinds of scholar. But valuable as such studies are, it is doubtful whether a great modern city can be properly treated as an element of a county; indeed this was never intended.

The academics who have contributed to local urban history fall into several categories. There are those who have addressed themselves to particular happenings within the town as part of a national phenomenon: the local role in municipal evolution, parliamentary reform, monetary debate, commercial policy, and so on. Others have studied regional happenings which have assumed national importance—the rise of selected industries, or of a chosen industrial region. Still others have investigated trading phenomena in remote parts of the earth as reacting upon local English economies. Some have contributed to more than one of these approaches. The work of all these academics is available to help the civic historian in matters of fact and perspective: Chapman, Ashton, Redford, Wadsworth and Mann for Manchester, Allen, Roll, Hamilton and Court for Birmingham, MacInnes for Bristol, Twemlow, Northcote Parkinson and Hyde for Liverpool, G. P. Jones for Sheffield and so on. These scholars have shown historical span in the sense of relating the local to the general.

¹ *History of Birmingham*. Conrad Gill, vol. I, *Manor and Borough to 1865*, pp. viii + 443; Asa Briggs, vol. II, *Borough and City 1865-1938*, pp. xi + 328. (Oxford University Press. 1952. 2 vols. 63s.)

But for the professional economic and social historian (with the exception of Dr Chaloner with his study of Crewe) the town or city as a continuous entity has scarcely existed.

For the amateur local historian the case is reversed. With him there is a profound sense of the reality and continuity of local history; the town itself becomes the dominating idiom. With such scholars the local past is a real thing because it is local. But they do not often have the power or resources to see what they have produced as part of a larger context, much less to organize the often extensive body of local fact into a comprehensive history.

But it would be unworthy to patronize the amateur scholar. He was first in the field, long before Archdeacon Cunningham founded economic and social history. One of the facets of the Georgian flowering of the late eighteenth century was the interest taken by local persons in the regional past: thus Bristol had its Barrett, Newcastle its Brand, Hull its Tickell, Birmingham its Hutton, Liverpool its Enfield, Manchester its Whitaker, and Leeds its Wright. Georgians like Hutton had a robust air of local patriotism; they told the story of their town because they were proud of it and wished others to know why. They certainly had little conception of the kind of 'scientific' historian who sets about his task with a chilly objectivity. There were many others, however, who in excess of zeal snowed themselves under with their material much of which has now reached our reference librarians as pathetic but often useful memorials to devotion without perspective. There seems, in general, to have been something of a pause in the production of omnibus local histories after these Georgian pioneers, until about the third quarter of the nineteenth century. By this time Victorian England was producing for most towns at least one account of the local rise and progress.

Somewhere between the Georgian fathers of local history and its Victorian practitioners the comprehensive approach was giving way to the particular; monographs and papers sponsored by societies were becoming the real media of local historiography. One of the early attempts in this direction failed sadly. The Statistical Society in London had hoped in the 1830's that each considerable town would form its own organization for the quantitative study of social data. The austerity of such an approach was too great; to ask local historians to quantify was too much.¹ Local history, having rejected the organized survey on a quantitative basis, became a matter of particular investigation, inspired not by the desire for a factual basis for policy (of which the humanists of course suspected the quantifiers), but by the subjective taste of the investigator. Local historians, who declined the rigours of organizing large bodies of measured information, cheerfully accepted the burden of exhaustive search for a particular category of fact.

There came into being a long list of honoured and active local and regional historical societies, all of which have made available material for civic and regional history: the Cheetham Society in Manchester, the Historic Society of Lancashire and Cheshire in Liverpool, the Thoresby Society in Leeds, the Surtees Society in Durham, the Hunter Society in Sheffield, the Birmingham Archeological Society, the Midland Record Society, the Bristol Record Society, and others, including many local literary and philosophical societies. Members

¹ But some were unwilling to accept defeat. One such was John Towne Danson who, after helping Tooke with his *History of Prices*, had migrated to Liverpool. There he tried to carry local learned societies in the direction of statistical studies of the town and region. But the old guard raised the cry that the humanities were in danger, and he was obliged to forbear.

of such bodies have often patiently edited the records of their borough. Among them there is often a high level of careful scholarship, not infrequently rewarded with the Fellowship of the Society of Antiquaries or even an honorary M.A. from a civic university. In fact every provincial city seems to have its body of historians who stand ready to provide information and advice on particular aspects of the local past to those who really wish to know, and to administer a drubbing to those who treat local fact casually.

Thus the academic and amateur students of local history have produced many valuable studies. But they have tended either to treat regional phenomena from a national point of view, or local subjects in such a way that parochialism has overwhelmed all general perspective.

The *History of Birmingham* is the outcome of a determination to make a new beginning in civic historiography. It was put in train in an earlier form before the late war, and Professor Gill's work upon the period up to 1865 dates from that time. Mr Briggs was asked in 1947 to do the second volume covering 1865-1939. It is clear that the special Sub-Committee of the General Purposes Committee took a lively interest in the project, and had considered views about its execution. There was in fact a tripartite co-operation between the Committee (many of whom it seems were local historians themselves), and the two authors. The result inspires great optimism in the prospects for local historical research on this basis. The Committee readily agreed that earlier plans should be abandoned and that the work should stand in its own right, and not as a centenary volume. Indeed, Mr Briggs has said, 'I have met with none of those difficulties and temptations which Professor Butterfield believes to be almost inextricably bound up with the writing of what he calls "official history".'

The two volumes are similar in structure, but quite different in flavour. Once the Roman, medieval and Tudor preliminaries are disposed of (in thirty or so pages), the leading themes assert themselves: the quality of local life, the physical structure of the city, its mode of government, its economic basis, and, though more diffusedly, the character of its leading men, and its impact on the great world beyond. In these aspects the town and city are studied over each successive phase of time.

But in spite of this, the two authors had very different tasks. The one was obliged to scrape together information that was rare and hard to come by; the other was faced with a plethora of fact. The year 1865 was chosen as the watershed, and no doubt it was somewhere in the 1860's that the galloping accumulation of data about the great industrial cities really begins. The method and approach of the two authors are different, as demanded by this change. Professor Gill is in the older tradition of local history, proceeding by search, then system. Mr Briggs occupies what has been the no-man's-land, covered with material, but abutting on the dangerous frontier of the present. He proceeds perforce by system, followed by selective recourse to his sources. Each method has its peculiar dangers. The one may cause the author, finding no available study of a particular aspect, to write a monograph, and then insert it as a chapter; the other may put him in danger of creating in the minds of local specialists the impression of thinness on particular points. Professor Gill clearly found the Committee's injunction against footnotes harder to bear; Mr Briggs's method rendered him safer from those multiple trapdoors that open at the bottom of each page to swallow up the over-conscientious or the pedantic.

But these were unavoidable risks, and the authors have successfully met them. Perhaps the failure of so many earlier attempts at the history of cities occurred

because their authors had not combined in themselves these two necessary approaches. It required a peculiar assiduity to uncover the relatively few mementoes of earlier Birmingham and sort them into a story, and a peculiar sense of proportion to select the principal outlines of its later development and illuminate them with fact. In the nature of things Mr Briggs's portion is to a greater degree a programme for further research. It is of course no criticism to observe that most of his sources are secondary; there must be a rich store of private papers to be investigated by those who accept the challenge thrown out in his Preface, and enter this branch of historiography.

Professor Gill brings to a successful issue many years of study of the period down to 1865. He has told the story of the town to the end of the chrysalis stage with care and affection, though sometimes at too great length. He has brought together what the antiquarians have discovered about the remoter past; he has focused the studies of early Midland industry by Court, Allen, Roll, and Hamilton upon the town; he has reconstructed its physical and social aspects from Hutton and others; and from the surviving biographical material he has told us what manner of men were both creatures and creators of this new mode of life. His account of the struggle over the Charter, and the early stage of municipal government, based on the Council records, is his most valuable original contribution to the story. Here we learn that municipal affairs in Birmingham have never been a gentleman's business, but were, on the contrary, a matter of bitter party politics from their very birth. There never was a golden age in which the bulk of citizens proceeded eagerly to the polls to direct their city's future on objective principles. We are shown that the new Corporation did not become Benthamite by any simple route; the Council was fought for, not to create a medium for the performance of positive tasks, but as a means of ousting the rival oligarchy represented by the Tory Street Commissioners. The new Council was in fact actively hostile to assuming new functions, and the dogma of anti-centralization ruled in Birmingham, resisting all proposals by the Tories and others that the Council should seek to guide and form the great proliferation of men, streets, and machines over which it presided. Professor Gill minces no words in dealing with the days of the 1850's when Birmingham, governed by the new oligarchy sitting in the Woodman Tavern, dispensed with the services of the medical inspector as soon as the fear of cholera had abated. The civic career of Joseph Chamberlain is only to be understood in the light of the situation he found in Birmingham—one of accumulating tasks and embattled non-intervention.

What was the nature of the bearings which Mr Briggs took as the guide to his task? He set out to give a broad, comprehensive picture of the social essence of Birmingham at the beginning and the end of his period, a method referred to in some quarters as the writing of 'total history'. For the body of the book he chose as his themes not institutions or topics, but the leading problems thrown up by the city and the attempts to deal with them, paralleled by treatment of the attitudes and outlook of the successive generations of Birmingham people. In so doing he called to his aid all the formulations that contemporary disciplines could yield: social survey methods, economic theory, political science, and of course historical analysis.

In describing the framework of local society as it was in the 1860's, Mr Briggs selects three outstanding elements: the strength and role of non-conformity, the dominance of an extensive and diverse industrial background, and the close relations between masters and men. Then comes the renovation of the face of

the city in the 1870's and 1880's, partly inspired by the boom years of the 1870's, and dominated by the great civic venture of the building of Corporation Street. We then turn to the economic base of Birmingham, in this phase dominated by the development of the new steel alloys and by the rise of the new electrical, cycle, and motor industries. But in spite of these new products, we are shown how growing manufacturing competition caused the Birmingham industrialist to move away from the old radical confidence in free trade, and for both sides of industry to seek effective means of combination.

Mr Briggs had to deal with Joseph Chamberlain, whose significance for Birmingham was such that he might easily have swallowed up much of the volume. But the author has rigorously disciplined him; he appears here in full stature, yet as a proportionate part of the civic picture. The new civic gospel had Chamberlain for its standard-bearer, but it was more fundamentally a part of the continuous story of the city. The fervour of the moral crusade itself owed much to the fact that it was launched at a time when Birmingham was well behind the other provincial cities; the zeal to persist was generated initially from local shame. The early gospel as carried through during Chamberlain's mayoralty from 1873 to 1876, had three great points: the municipalization of gas, the taking over of water supplies, and the improvement scheme.

Then followed the taking over of the tramways, the coming of a municipal electricity supply, and the struggle for adequate educational facilities and social amenities, all under the aegis of an active and devoted Council, rapidly developing for itself an unprecedented committee system that was both efficient and comprehensive. Around the turn of the century came a lull in the undertaking of new ventures. It was due to a loss of faith in expansion, which persisted until the new concept of Greater Birmingham arrived to dominate the scene. A second flowering of municipal enterprise ensued, culminating in the Greater Birmingham Act of 1911. This made it possible for the city to assume such proportions as would aid the attempt at civic efficiency, and brought a new emphasis on the modern city as a problem in planning.

The story of the Birmingham caucus is a fascinating chapter in political history, and Mr Briggs recounts it with obvious relish. Here, for a moment, he is relatively free of the preoccupation of twining diverse strands, and can give an almost self-sustained account of this unique political phenomenon. We learn how the roots of successful organizing technique ran back to the brave days of 1832. By the early 1870's the Liberal Party organization in Birmingham was so well entrenched as to constitute a national byword. This was the instrument for carrying out the great Chamberlain reforms, and it appears that without it much less would have been achieved. For a time the caucus even threatened to dominate the national scene, in the form of the National Education League and the National Liberal Federation. Yet it foundered on the rock of Ireland, and an association impregnable to attack on the matters out of which it arose went down before the apparently remote issue that reached so far into English life. But Chamberlain and Birmingham were not divorced. The Unionist cause involved protectionism, and by this time both business opinion and Tory organization had reached the point at which both were ripe for Conservative conversion; the new Chamberlain was still the voice of Birmingham. In the background were the stirrings of the Labour Party, destined to give the *coup de grâce* to Birmingham Liberalism.

The war lies, in a sense, like a fault across the story. Yet its insatiable demands dramatized in a new way the status and role of Birmingham in the national

life, and revealed the structure of its economy and society. The inter-war years offer the acid test of this sort of history writing; how to tell the tale of this proliferating mass, without the aid of time perspective. In civic affairs the themes of education, transport, municipal trading, hospitals and city extension are brought down to 1939. Housing assumes a new stature; the new estates were the 'basic social products of the twentieth century', and much of the social history of the 1930's, Mr Briggs remarks, is lost in the silence that surrounds them. In industry the traditional diversity of products brought its reward in relative immunity from distress. At long last the master-man relationship had become thoroughly impersonalized in its last stronghold, and great national combinations embraced local industry. Finally, the tariff was brought back, and another Chamberlain speaking for Birmingham this time carried the country with him.

There are two ways of looking at these volumes. We can take them as unique exercises in historical writing—the position they in fact occupy—treating Birmingham largely as though no other great city existed. Or we may consider the sort of thinking to which they would contribute if they stood alongside equally scholarly volumes dealing with each of the great English provincial cities, so that the emphasis lay upon such cities in general as an object of historical study.

It was the primary business of the authors to tell the story of Birmingham, and their task is well done. But the feeling grows upon the reader as the material accumulates that an attempt at generalized thought about the growth of cities and the evolution of the societies they house might have yielded suggestive formulations to assist in the presentation of the material. Professor Gill with his chronological grouping, and Mr Briggs with his concept of 'total history' based upon observing an organism, have both chosen to leave comparative study alone.

The industrial towns like Birmingham constitute one group of provincial cities; the outports are another. The history of the former is usually an inverted pyramid—an enormous bulk of recent fact resting upon a tiny deposit of 'real' history, hardly distinguishable from the story of the surrounding countryside. With the outports things are rather better—their story usually goes a good deal farther back. They have long been significant as focuses of trade, elements in the logistics of war, and ganglions of human intercourse, engaged in continuous struggle against London and its monopolists. Yet the outports were largely the creatures of the hinterland towns. They were capable of some independent initiative as when a new area abroad was opened to trade, and men could busy themselves in narrowing the newly discovered discrepancy in the patterns of price ratios. But in the main they reacted and expanded following upon the technological changes in their rear. This has tended to be overlooked, partly because the outports could be treated in terms of a general theme, world trade, which seemed to give greater intellectual satisfaction than the apparently arbitrary spread of cost-lowering inventions. Trade seems to offer a sense of process and interrelationship, but with an industrial background change seems to stem from technology almost as an independent variable. But though the two kinds of city have properly been discussed in very different idioms, they are nevertheless capable of illuminating each other.

It would be interesting to compare the manner in which the Georgian cultural flowering affected the various English cities. These little groups, as with Birmingham's Lunar Society, were no mere provincial coteries aping the high-flown discussions of their metropolitan betters; they were often in fact the growing

points of national thought. In many cities these Georgian worthies have become to both sides of contemporary political debate, by gentleman's agreement, a matter of bilateral prestige. Thus may the radical man of letters, the fellow-travelling intellectual who condemned the war against France in 1793 become the present-day ornament of highly conservative institutions, and the name of the swashbuckling tycoon of an earlier age be spoke with relish and respect by the proponents of a socially secure society. A real study of the discussions of these men, though it may damage this happy revelling in the legend that we all stem from giants, might yield valuable results. For example, it is of some interest that philosophical speculation took quite different turns in Liverpool and Birmingham. In the former, moral philosophy, with its roots in man, was the predominant approach; in Birmingham natural philosophy with its preoccupation with material phenomena was dominant. Thus the Liverpool Georgians were all called by their philosophy to active participation in local affairs; the Birmingham Georgians were impelled by their speculations to new industrial enterprises. The great names of Birmingham right down to the mid-century, do not figure in local proceedings: Mason, Elkington, Tangye, Chance, Gillott, all left local affairs to lesser men. The quality of Town life, deteriorated by their undertakings, had no aid from their minds, until Joseph Chamberlain appeared upon the scene. Then only did municipal affairs pass from the hands of petty traders. To what degree was it the case that real progress in the industrial cities had to wait until the tycoons had had time to build up their fortunes, before the best entrepreneurial skill was applied to the city?

Professor Gill describes the great influence of the Victorian ministers and clergy, the 'powerful preachers' who played so large a part in Victorian provincial life. Again, it would be worth while to penetrate beyond a list of their miscellaneous good deeds and inquire into their real nature and significance. Such local giants as Miller, Angell James, Dawson, Vince, Dale and Crosskey did not just happen; they were the 'voice' of Birmingham in a sense that has had no precedent or succession.

The challenge of method facing Mr Briggs was much greater than Professor Gill's. For it is to Volume II that students of modern cities will in the main turn for illumination of their problems. What are the merits in this case of total history as opposed to some form of theme history?

Total history, by its nature, is non-committal. Its principal aim is the construction of the contexts and problems which successively dominated the scene; it is an exercise in organizing and description rather than analysis. Theme history almost inevitably involves teleology—some theses about the purpose of cities and their success in attaining it. Total history can easily grow dull as the picture is being slowly filled in; we feel we are doing some worthy reading, but the pulse is seldom quickened. As the civic boundaries extend step by step we wonder whether the accommodation of local authorities to one another in the face of obvious necessity is all that need be said, or was the process resistible, or capable of deflection or delay? We think of Roscher, who introduced his discussion of general industrial and commercial policy by treating of the city as a phenomenon through which these things became possible.

The difficulties of studying the city in terms of purpose are sufficiently obvious: they consist, of course, first in establishing that purpose and not mere improvisation is present, and secondly in finding an adequate statement of purpose. One possibility would be to treat the problem in two stages. What are

the conditions which call cities into being, and what relationship do these conditions bear to one another? Pretty clearly our cities exist in order to further efficiency in production and consumption; though other elements of civic life are important, this clearly is the necessary reason for their existence. The technical optima of firms, of services, of governmental units, constitute the conditions of efficiency. The substantive story of each city is to be found in the struggle to reconcile these optima in a single entity of government and loyalty. Yet men will think their thoughts and express themselves in words and deeds within the city, and may even conceivably become idealist enough to choose to forego material efficiency for some other end, and thus impair their city in its primary function. So, in one sense the story of each city is the same; yet in another each is unique. All are serving the same primary aim by the reconciliation of conflicting considerations, yet each must find its own terms of compatibility.¹ Those who fear that the writing of the histories of the great industrial cities would result in the same tale many times told should remember this distinction.

Perhaps at the present stage of such historiography and its sponsorship the choice of expository method made by Mr Briggs was the wiser. He would no doubt admit that his is a first approximation, and for such a purpose it is wise to be inclusive and free from too great a degree of unity. But the exciting task of finding an idiom in terms of which to cultivate this valuable but neglected field remains to be done. Indeed, it will always be changing as civic and regional history grows and our knowledge increases.

Mr Briggs permits himself one tiny echo of the centenary banquet in his peroration, but perhaps we should take this as a sign that he fell in love with a subject which has had but few modern suitors, and none so worthy as he. The reading amenities of ancient foundations were exchanged for the crowded Gothic vault of the Birmingham Reference Library: it may well be that more historians of social processes could profitably follow Mr Briggs into local collections and beyond them into local life.

Is there room for fruitful collaboration between professional and amateur in the study of civic history? Can a better division of labour be arrived at whereby the more general and continuous reflection of the one may help to designate particular topics, the careful cultivation of which can be carried out by the other? For this to be possible some change of attitude is called for on both sides.

For those professionals who still see history in terms of the moralizing panoramas of Dr Arnold or Charles Kingsley, the study of ancient parchments as with Stubbs, or the grand theses of Buckle, Savigny, Maine, or Toynbee, the moiling provincial cities have appeared as the end product of a cosmic social process, thrown up by the one-way action of fundamental forces. It is time that the professional historian turned his attention to the nature of cities as determinants of national life rather than as end products.

For the amateurs of local history there is a different challenge. Should there be an open battle of the styles between those who having chosen a topic, put in everything they have discovered about it, merely because it is local, and those who argue that a problem should be posed and a selective attempt made to solve it? There is the further question of time barriers: how close should such Societies come to contemporary problems? There has been a tendency to stop off well before the 1850's; most local historians fight shy of the study of issues

¹ I am indebted to Mr H. R. Parker, Lecturer in Land Economics, The University of Liverpool, for this approach.

the expiring echoes of which they heard in their youth. Perhaps this has something to do with fears of disrupting the Society by the revival of ancient postures and slogans that gained fixity in early years; perhaps it is merely the view that history ends where living memory begins. However this may be, if local historians are to help the authors of more general history in the most difficult part of their task—as the present is approached—they must shift their time barrier by at least fifty years.

It is clear that city fathers have some responsibility in the matter of their own past, as was recognized in Birmingham. These volumes show how a Council can take upon itself the sponsorship of its own local historiography; they should be the beginning of a tradition of municipal histories. Is it too much to hope that every twenty years or so the history of each of our great cities may be rewritten not only to incorporate new knowledge, but as a continuous attempt to extract the meaning of urban life?

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REVIEWS

P. B. STRUVE. *Sotsial'naya i ekonomicheskaya istoriya Rossii s drevneyshikh vremen do nashego, v svyazi s razvitiyem russkoy kul'tury i rostom rossiyskoy gosudarstvennosti* (Social and Economic History of Russia from the ancient times to the present, in connexion with the development of Russian culture and the growth of Russian statehood). (Paris. 1952. Pp. 386.)

The comprehensive study of Russian economic history which Professor Struve had set out to write and to which the quaintly elaborate title was meant to apply has remained a torso. The present volume contains, in addition to two introductory chapters, a fully completed part (seven chapters) on the early medieval period, carrying the story to the time of the Mongolian invasion, and five chapters of the second part dealing with the rise of Moscow; four of these chapters were still in first draft at the time of Struve's death in 1944. A long Appendix (occupying more than two-fifths of the volume) presents a series of reprints of various papers, including three articles on Russian feudalism and Russian peasantry and a number of obituaries devoted to Soloviev, Kliuchevski, and other Russian historians.

The book as conceived by the author was designed to reveal the 'historical roots' of the Russian revolution which 'are buried deeply in Russia's historical backwardness'. The flow of Russian history was to appear as a perennial struggle between freedom and compulsion, between free and regimented economic activities, and the Russian revolution was to emerge as a 'grandiose reaction of the traditional forces of compulsion against the equally traditional forces of freedom' (p. 7, Preface, written in 1938).

Those are exciting promises, and they are that particularly to this reviewer who has come to believe more and more that very important aspects (including the changing degree of economic compulsion) of the economic history of both Russia and the West can be discussed fruitfully in terms of changing levels of economic backwardness. It is, therefore, with a keen sense of regret that one realizes that the promises have remained unfulfilled. The story as presented here stops at such an early point in Russian economic history that one fails to discern more than the vaguest contours of the grand historical conception that was in the author's mind.

There is no need to summarize here the actual contents of the book. It would be impossible to reproduce the wealth of interesting details and the fascinating discussion of the sources. On the other hand, Professor Struve's earlier essay in *The Agrarian Life of the Middle Ages* was essentially in the nature of a brilliant summary of the material collected in the present volume.¹

The balance of this review may be confined, therefore, to a few comments. Perhaps the central point in Professor Struve's presentation refers to the refutation of what he calls the slavophile and the Marxian legends which assume the original existence of the village commune (*obshchina*) among the Eastern Slavs. Professor Struve believes that such an assumption has no foundation in reality. In taking this position he continues the work of some distinguished Russian scholars such as B. N. Chicherin and V. I. Sergeyevich whose views in some sense were the Russian counterpart of those of a long line of Western scholars

¹ *The Cambridge Economic History of Europe*, Vol. 1 (Cambridge, 1942), pp. 418-37.

from Fustel de Coulanges to Dopsch. Struve's position seems unexceptionable, and it may be noted that even a modern Soviet historian has had to admit that 'the sources contain no indication concerning the existence of the *obshchina* in the ninth and tenth centuries'.¹

Much less well founded, however, is Professor Struve's bland identification of the legally free segments of the peasantry with an economically dependent class occupying lands belonging to members of a small landowning group. The inference is that no loss of land by the peasantry could ever have occurred in the later periods for the simple reason that the peasants had never owned the land. It is obvious that the existence of such a situation under conditions of abundant land resources calls for an explanation. According to Professor Struve, such an explanation is provided by the scarcity of capital, which was concentrated in the hands of the landowners. This view is hardly satisfactory, least of all in the unqualified form in which Struve chose to present it. On the one hand, it tends to overestimate the importance of capital in an extensive agriculture where the use of capital was kept at a minimum. On the other hand, it overlooks something of which the author is perfectly aware elsewhere in the book (cf. pp. 124-5), to wit, those peasant obligations which were in the nature of tax payments rather than of interest payments on capital advanced. As a result, the author neglects the position of the 'black' peasants, occupying non-alodial 'black lands' which in juridical theory may have been 'owned' by the holder of the political power, but in economic practice were in the possession of tax-paying peasants. The obligations of 'black' peasants were in essence political, and it is perhaps significant that Professor Struve has avoided any discussion of capital ownership on 'black' lands.

An important and unfortunate consequence of this generalization from the conditions on alodial or 'white' lands to the peasantry as a whole is the failure to prepare the reader for the understanding of the crucial significance of the transference of the 'black' lands by the Moscow princes to the members of the 'serving classes' (army and bureaucracy), a process so much comparable to the *Alienation* of Crown lands in seventeenth-century Sweden. In fact, it might be quite in accord with the spirit of Professor Struve's general conception to suggest that it is in this alienation (which, unlike the development in Sweden, was *not* followed by the *Reversion*) that the deepest roots of the Russian revolution must be sought.

But one must stop here. Strictures of this nature can hardly be fair when addressed to fragments of what doubtless would have become an outstanding contribution. Had the book been completed, major shifts in emphasis may have been introduced and those portions which have become available may have appeared in an altogether changed perspective. At any rate, one has every reason to be grateful to Professor Struve's sons who by publishing this volume have provided us with this insight into the laboratory of a great economic historian.

A very useful bibliography of Professor Struve's writings has been appended to the book by the editors.

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¹ Cf. S. B. Yushkov, *Ocherki po istorii feodalizma v kievskoy Rusi* (Essays on the History of Feudalism in Kievan Russia), Moscow-Leningrad, 1936, p. 8.

JOAN THIRSK. *Fenland Farming in the Sixteenth Century*. (University College of Leicester. 1953. Pp. 45. 6s.)

The great fenland basin of England falls into two natural divisions: the inner basin of the peat fen, the coastal fens around the Wash. The coastal fenland lies almost wholly in Lincolnshire and Norfolk: on the western shore of the Wash, in the wapentakes of Skirbeck and Kirton; along its southern shore, in the wapentake of Elloe and the Norfolk Marshland. It is with the coastal fenland, in the first three of its four provinces—the three Lincolnshire wapentakes which make up the Parts of Holland—that Dr Thirsk's study is concerned. Her account of its rural economy is careful, concise and thoroughly documented, and a clear picture emerges. Here the earliest settlement was not, as in the inner basin, on clay islands and the upland margin, for neither of these were at hand; but along a ridge of silt running parallel to the coast. On this ridge were villages and open fields; fields which, as far as the evidence goes, do not seem to have differed fundamentally in lay-out from the open fields of the upland. But great potential wealth lay on either hand: inland, the fen; to seaward, what the inner basin lacked, the coastal marshes. Next the sea lay the saltmarsh: some of it coarse grazing, some good, but liable to be drowned at spring tide. By silting from the sea, the saltmarsh gradually rose—especially along the southern shore, in Elloe. Raised marsh could be enclosed, and protected from the tide by a sea bank. So saltmarsh became fresh marsh, affording improved grazing; and in time some of the fresh marsh could be converted to fertile arable. Meanwhile, as the marsh continued to grow seaward, the process of enclosing and embanking could be repeated, and new fresh marshes won from the salt. To landward of the silt ridge lay the fen; and the fen could furnish rich, abundant, unstinted summer grazing, and hay besides for winter.

By the sixteenth century, and indeed long before the Middle Ages ended, much of this potential wealth had been realized; marsh and fen had been reclaimed, and a more ample pastoral economy had been superimposed on the limited arable husbandry of the silt. By the sixteenth century, crops, though not unimportant, were subsidiary; many farmers tilled no arable at all, and corn was probably imported from other districts. Dairy cattle, sheep and the breeding of horses were the main branches of husbandry; butter and cheese were staple products. For the maintenance of its livestock, each parish had its own fen and marsh; and outside all parish boundaries lay great tracts of commonable fen—such as Holland Fen, upwards of 20,000 acres, where eleven parishes in Holland and two in Kesteven intercommoned. The villages on which the flocks and herds were based were still for the most part the original villages of the silt belt; but they were large villages now, and some of them grown into sizeable market towns. Holland, in proportion to its area, was the richest part of Lincolnshire. Holdings were usually small; but a man thrived by his grazing rights. And wealth here was more evenly distributed than in the upland: no squires, and a village aristocracy of substantial yeomen.

Since those days, the economy of the fenland has been utterly transformed: then, cattle and sheep and horses; now, wheat, potatoes, sugar beet, fruit and flowers; and pasture far to seek. And yet—no squires; villages few and large; holdings many and small: those words might have been written of the modern fenland. The roots of these things go deep.

JOHN SALTMARSH

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JOHN EHRLMAN. *The Navy in the War of William III, 1689-97*. (Cambridge University Press. 1953. Pp. xxiii + 710. 63s.)

Mr Ehrman has no difficulty in establishing the importance of the period he has chosen to study. These were the years when the Royal Navy, adapting its organization on land and on sea to the great ship of the line, became the leading sea power of the world, 'without a rival or even a companion'. And thus, for many years this was to continue. It would be tempting to follow Mr Ehrman into his account of naval affairs: for this is indeed a remarkable book—prudent, methodical and imaginative. But this review must necessarily be concerned with the economic aspects of Mr Ehrman's study. Again, the two principal economic relations emerge clearly. There is, first, the Navy as an occasion of economic demand. This may be summarized in the author's own words. In 1688 the Navy was 'the most comprehensive and in some respects the largest industry in the country...'. It appeared as 'a substantial importer of raw material, as the biggest shipbuilder, both in its own right and by contract, in England, as one of the two biggest purchasers of agricultural produce and clothing material, as a large medical institution, and—with 15,000 men on its pay roll in 1688 and treble that number a few years later—as one of the biggest employers of labour in the country'. These purely economic activities are analysed with skill and penetration in the first of the two halves into which the book is divided—the machine at rest, as it were. In the second half—the machine in motion—we are shown them again, in relation to active warfare.

The economic historian's second interest in this book is more imponderable. What was the Navy's place in relation to the development of the whole economy? How much of its function was related, directly or indirectly, to problems of trade protection? What part did it play in fostering expansion of overseas trade? How far was naval expansion itself dependent on a particular kind of growth of national wealth? Here again Mr Ehrman goes to the root of the matter: 'Maritime war did not merely help her [England] to gain wealth, its progress directly increased wealth, and the expensive fleet stimulated and did not exhaust trade and industry... Power and wealth reacted upon each other, and increasing costs were met by increasing resources.' It would not, perhaps, have been proper in a book directly concerned with a short period to select such a thesis to be worked out in detailed relation to the spread of overseas trade, and the growth of the whole mechanism of business, public finance, economic legislation and mercantilist thinking. One can only hope that Mr Ehrman will one day find an opportunity to work out the implications of his idea at length.

If there is a criticism of this excellent study it is a minor one which hardly affects the main value of the book. From time to time Mr Ehrman hints at the relationship between this period of Anglo-French rivalry and the earlier period of Anglo-Dutch rivalry. This latter period he sees as one between protagonists fighting 'on the same terms'. The struggle was 'direct and unambiguous', whereas the Anglo-French rivalry lay between a power increasingly dependent on sea-power and another much less so. No one is likely to dispute this latter point: but the conception of the earlier period seems to me to underrate the extent to which conditions altered between, say, 1650 and 1689 or 1714. A study of the strategic ideas of the first Dutch war would, I think, show that the English, while clear enough about the importance of seeking out the enemy and destroying him (a virtually impossible task), knew that they themselves had only one real vulnerable point—the North Sea coal trade. This was by no means unimportant but it was not decisive. In all other respects the struggle

was unequal, for whereas the Dutch economy relied at every point on overseas trade, the English economy could hold out for longer without it—as yet. Even the disasters of the ‘defensive’ phase of the second Dutch war were due not to any essential change in this potentially favourable situation but to ineptitude and mismanagement.

C. H. WILSON

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EDWARD HUGHES. *North Country Life in the Eighteenth Century. The North-East, 1700–50.* (Oxford University Press; London, Geoffrey Cumberlege. 1952. Pp. xxi + 435. 30s.)

The main theme of this study—in so far as so rich and diverse a work can be said to have a single theme—is the development in Tyneside of a society based predominantly on coal, and the repercussions of this development on the conservative hinterland. There are two possible ways of dealing with such a subject. One can take a single aspect and investigate all the available sources for the light they shed on it; or one can study a single source intensively for the light it sheds on all aspects. Professor Hughes’s choice of the second method was settled for him by the appearance of an unusually rich collection of records, the Cotesworth and Ellison MSS., belonging to one of the leading mine-owning families, the lessees of Gateshead. He has of course drawn on a wide range of other sources, family papers and episcopal registers among them, but this collection provides him with the core of his material. The advantage of this method is that it enables a practised historian like Professor Hughes, not only to write a book which recaptures the freshness and intimacy of real life, but to say something new about every topic of social history. It does mean, it is true, that we see the life of the area mainly through the eyes of the rising industrial and merchant families, as opposed to those of the older landowners, and predominantly too from the point of view of the upper ranges of society—there is not much information, for example, about conditions of labour in the mining industry. But the range of the work is impressive; it embraces everything from Jacobitism to the coal trade. It is the long and substantial chapter on this last subject that will be of most interest to economic historians. Particularly new and interesting is the information it contains about the trade with London; Cotesworth was the secretary of the combination of mine-owners known as the ‘Regulation’ which was launched in 1709, and his correspondence, from which Professor Hughes gives generous quotations, provides a detailed picture of its working. There is also much economic history in the sections on the Tyneside merchants, the professions, the agriculture of the area, and the organization of the estates of the Bishop of Durham. It is unlikely that any alternative method of approach would have produced a volume of such wide interest.

An author who covers so wide a range does, however, forfeit his chances of impeccability. It is scarcely possible that he should not on some subject betray an uncertain touch. This seems to me to have happened in the chapter on the Bishopric. This chapter contains a number of things which are puzzling, but the point I wish to raise here bears on its main theme—what Professor Hughes terms the ‘Episcopal Recovery’ of the eighteenth century. Although it is not put very explicitly the argument seems to be that, in the later seventeenth and early eighteenth centuries, episcopal properties were leased on terms which were extremely favourable to the lessees, that in the course of the eighteenth century

the rot was stopped, and that this improvement was due to the tightening up of the episcopal estate administration, and particularly of the policy in regard to leases. The difficulty is that Professor Hughes does not give us the facts necessary to form a full judgement of the bishops' leasing policy. The mere fact that, in the case of a particular property, a fine of so many pounds was paid for a renewal of the lease, or that 'the bishop's reserved rent—was only a fraction of the annual profits of the lessee' is no proof by itself that the lease was being granted on unduly cheap terms; and the fact that Professor Hughes quotes such isolated details as if they did constitute proof arouses the suspicion that he regards the mere existence of the beneficial lease as proof in itself that the bishops of Durham were making unfavourable bargains. But this was, of course, the common form of lease on ecclesiastical estates, and before we can judge whether the bishops were making a bad bargain, we need to know, at least, not only the fines and the reserved rents of the properties, but their annual values and the terms of the leases. On the information given, it is not possible to deduce the principle on which the bishops capitalized the annual value for the purposes of calculating the fine, but from an incidental reference it may be guessed that in Durham, as often elsewhere in the early eighteenth century, the fine was one year's purchase of the annual value for a lease in reversion of seven years. Nothing in this study precludes the possibility that this was also the rate in the later seventeenth century. Now there are respectable arguments for the view that the bishops could, as a general rule, have obtained better terms, but it is not certain that they could have, and the reference by a Cambridge undergraduate of 1718 to a very partisan statement of the position (quoted on p. 311) is far from proving the point. Whether or not they could have got better terms, it does not look as if they did so in the first half of the century, for we find the bishop in 1751 calculating a fine on the same one year rule. In 1789 the rule appears to have been one and a quarter years' purchase, a not uncommon rate for the time. This change may have been due to improved administration, though there may also have been a change in the market for beneficial leases. But, in either case, it may be suspected that most of the increase in the income from the episcopal estates, even for this later period, arose, not from changes in leasing policy, but from a development for which the bishops were not responsible—an increase in the annual values, due to the general economic development of the region. But in this chapter, as in several others, Professor Hughes has been pioneering. He has had for the most part to drive his own Roman roads through the original sources with exceptionally little help from modern monographs. It would therefore be particularly inappropriate to end with criticism. Uncertainty in the handling of some technical points is a small price to pay for having this large tract of history brought under cultivation. Everyone working on the eighteenth century will look forward to the study of west Cumberland which the author promises in his preface.

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ARCHIBALD and NAN L. CLOW. *The Chemical Revolution*. (Batchworth Press. 1952. Pp. xvi+680. 50s.)

The outstanding merit of this volume lies in its wide scope. It traces the connexion between the various scattered developments that occurred in every department of chemical technology in the eighteenth and early nineteenth centuries. Dr and Mrs Clow are not only concerned with the transition from

natural to artificial soda, the essence of the Chemical Revolution: they also set out to indicate the many ramifications of the expanding chemical industry. The ever-increasing supply of soda, first in the form of imported barilla or native kelp, and later in the form of British Alkali produced by the decomposition of salt, transformed the soap industry. The growing supplies of soda and soap, together with bleaching powder, later a by-product of the soda synthesis, kept pace with the mounting requirements of the textile industry. The writers extend their range further: there are chapters on glass, paper, pottery, iron, tar, coal-gas, candles, fertilizers, sugar, brewing and distilling, and food preserving. The whole volume, in manuscript awarded the Senior Hume Brown Prize in 1945, represents an immense piece of painstaking research, to the extent of which a 35-page bibliography testifies. 110 well-chosen illustrations and 16 diagrams give additional worth to what must be welcomed as an important pioneer work.

Throughout the book the authors are dealing with what they call 'the hitherto unexplored ground common to economic history and chemical technology'. They have obviously found it very difficult, in carrying out such a widely-ranging survey of this no-man's-land, to spend sufficient time on any particular section in order to carry out the detailed exploration that was necessary. In general, they seem to have been obliged to hurry on from one aspect of the subject to another after consulting a number of sources, some original and some secondary. This gives the whole work a regrettable unevenness and occasionally leads to errors. In the section on glass, to take but one example, an original source, *The Thirteenth Report of the Commissioners of Excise Enquiry on Glass* (1835), is cited *via* a book published in 1923 to make a point which the *Report* itself shows to be largely untrue. This is by no means an isolated case.

The Senior Hume Brown Prize is awarded for an essay in Scottish history. This has an advantage, so far as *The Chemical Revolution* is concerned, in that Scotland was the scene of many of the early pioneering developments in industrial chemistry. But when the writers from time to time extend their purview south of the Border, these excursions are apt to yield misleading results. The home of the Backbarrow Company (p. 330) was in Furness (not Furnace), for instance; and many of the details of James Muspratt's early beginnings on Merseyside (pp. 110-12), a key phase in the history of the soda industry, are inaccurate. Blemishes such as these make it all the more regrettable that the authors, perhaps through delays in book production, have been unable to make use of the important contributions dealing with aspects of the Chemical Revolution in England which have appeared within the last few years. The bibliography includes no work published after 1941. Dr Singer's *Earliest Chemical Industry* (1948) is only given a passing mention in a footnote and there is no reference whatsoever to Dr D. W. F. Hardie's *History of the Chemical Industry in Widnes* (1950) nor to Dr Richard Padley's stimulating paper on 'The Beginnings of the Alkali Industry' (*University of Birmingham Historical Journal*, vol. III, no. 1, 1951).

From one point of view, this book has been written too soon; much more original research on particular aspects of the Chemical Revolution is required before a comprehensive survey of the whole subject can be satisfactorily attempted. But, on the other hand, if the detail often leaves much to be desired, the broad technological outline stands out clearly and is of considerable value. Historians should be grateful for a bold attack on a subject which had previously given them pause on account of its complexity.

T. C. BARKER

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GEORGE W. F. HALLGARTEN. *Imperialismus vor 1914*. (Munich: Verlag C. H. Beck, 1951. Pp. xx + 561. Pp. vii + 505.)

Historians are by now becoming bored with the debate as to whether history is a science or an art. In so far as this logomachy is still kept up it is largely in the no-man's-land between history and sociology. It is in this disputed field that Professor Hallgarten has grounded his massive 'treatment of the romanticizing prewar imperialism with anti-romantic, rational methods' which are indebted, in particular, to those of Max Weber.

Professor Hallgarten's sociological study of the relations between the imperial powers, with special reference to Germany, before 1914, gathers mass and momentum as it ranges from rather sketchy introductions to English and French foreign policies through the ages, down to detailed treatment of the social and economic forces at work upon those foreign enterprises of the Second German Empire which formed the prelude to the First World War. In this latter sphere the author has much to contribute from his copious and solid reading of authorities and sources, mostly already printed. Especially valuable is his filling out of the diplomatic documents and memoirs by a thorough use of the German press: newspapers are apt to be awkward sources by reason of their bulk and need of checking, but *Imperialismus vor 1914* reinforces the argument against their neglect.

The epoch which ended, largely, in 1914 offers a specially fruitful field for Professor Hallgarten's research since it did much to bear out Lenin's equation of colonial imperialism with capitalist finance. And in that late-capitalist economy Germany stood forth as the newcomer who crammed the industrial development of generations into a matter of decades and, with her modern techniques, went forging ahead to overhaul the prime originator of the Industrial Revolution, Great Britain herself. Yet the fact that it was precisely in the case of Germany that colonial expansion was an expensive luxury in terms of economics already suggests that the Marxist formula calls for rather subtler and more searching analysis than Professor Hallgarten always provides, even though he is careful not to claim that the only driving forces were economic. In his final summing up, for instance, the author seems inclined towards the rather easy assumption that 'fleet-building Germany' needed 'the strategic securing of her continuous expansion overseas' (vol. II, p. 400).

In general, however, *Imperialismus vor 1914* shows up many significant economic factors: for instance the contrasting connexions of the Deutsche Bank and the Diskontogesellschaft in the 1880's, financial co-operation between German capital and Orleanist circles in France, and interesting figures from a private Russian source—one trusts that they are reliable—illustrating the extent to which French finance had by 1914 acquired control of Russian enterprises. All in all, Professor Hallgarten has made a considerable contribution to his field of study, and one which will remain a valuable source of reference. This makes it the more desirable to analyse one's feeling of disappointment that the book seldom quite achieves that sweep and authority which one is led to hope for. Partly, perhaps, is this due to the way in which, as Professor Hallgarten explains, the concept of his main theme was modified as he went along—the title originally projected was 'Parties and Foreign Policy'. As it is, one feels that, despite the introductory 'Theoretische Grundlegung', the author may have kept too closely to chronological narrative, to presenting an economic commentary upon events rather than a truly sociological analysis of them. Where the latter occurs its bearing is, so to speak, more often tactical than strategic. The author's economic interpretation does not compel any exciting

and large-scale revision of previously held ideas about the main events leading to the First World War. In this respect the economic approach to policy and diplomacy has here proved less rewarding, on the whole, than the military: as for instance in studies of the influence of the German General Staff or, on the other side, in A. J. Marder's fascinating evaluation of *British Naval Policy, 1880-1905*.

Professor Hallgarten, unlike Marder, has been handicapped for want of the necessary archival material; he does not usually cite private commercial archives and was unable to secure access to the two most important categories, for his purposes, of official documents, those of the German Colonial Office and the economic files of the German Foreign Office. Thus, as the author himself readily indicates, his conclusions must often be provisional. Provisional conclusions frequently supply a novel stimulus but it is no reflexion upon Professor Hallgarten if his novelties are sometimes somewhat dated, since the main bulk of his book is twenty years old.

The author completed his work in Munich in August 1933 and had his bibliography destroyed by the police of the Third German Empire: an unhappy warning in practical shape of the extent to which the then prevalent economic interpretation of history might require some modification to permit a juster and sterner allowance for the implications of the unfashionable 'drum and trumpet' school. In his original preface, written in Hitler's Germany, the present historian still proclaimed: 'This book consciously leaves the settling of the irrational limits of the ego to the philosopher, their psychological interpretation to the poet.' The trouble is that history does not always do the same.

While the author's full manuscript had to wait long years for publication, what he terms 'an extremely severely shortened and popularized extract' of 364 pages was published in Paris in 1935 under the title of *Vorkriegsimperialismus*, by Wolfgang Hallgarten. He does not mention in *Imperialismus vor 1914* that all the supporting documents at the end are reprinted from the earlier abridgement. The present work is, however, a decided improvement upon the earlier one, which lacked the very useful footnotes; these now include convenient references to new material which has appeared since the original completion of the manuscript. *Imperialismus vor 1914* further represents a judicious, sometimes almost too judicious, toning down of statements made in *Vorkriegsimperialismus*. Thus King Edward VII and Eyre Crowe are no longer so blatantly exhibited as upholders of 'the English monopoly of the exploitation, often scarcely to be distinguished from pure robbery, of half the earth' (*Vorkriegsimperialismus*, p. 189). We also now lose the lively thumbnail-sketch of Mr Winston Churchill at the Admiralty as 'a youthfully elastic, unscrupulously uninhibited imperialist' (*ibid.* p. 245). On the other hand Professor Hallgarten's earlier assurance that at the spring of the Panther in 1911 'all Germany rejoiced' (*ibid.* p. 237) now reads, 'the Pan-Germans rejoiced' (*Imperialismus vor 1914*, vol. II, p. 183). History is the home of revision, but in this case it is not entirely reassuring to watch it being smoothed out.

Great historical writing usually springs from an imaginative sympathy with the subject such as Professor Hallgarten would scarcely claim to feel for his field of 'Beutekapitalismus' and 'Raubpolitik'. He tends to exhibit the seamy side of his theme with somewhat vulgar relish, for instance in his account of the Ngoko-Sangha project of 1909-10. (His tracing of the threads of that project, by way of the Congo railway project, through to the French compensation to Germany in the Cameroons after Agadir is, however, a good example of the helpful illumination which his study affords.) Professor Hallgarten's acerb

assessment certainly does not spare German 'feudalism and exploitation-capitalism' and their large measure of success in swaying German socialism. One feels, however, that he treats with especial distaste the policies of France and of 'the diplomats of Downing Street, filled with hatred' (*Imperialismus vor 1914*, vol. II, p. 185). Those who impute hatred are liable to be suspect of it. As the author explains, however, 'this book is a product of war' (vol I, p. x), of the First World War. It is a further example of that attitude towards the history of the period which, favourable to Germany, has considerably influenced historical writing not only in Germany, but also in America, whither Professor Hallgarten resorted: the attitude, namely, that the policies of most European powers before 1914 were discreditable because imperial so that Germany's differed from others, if at all, merely in a matter of degree. But there comes a point, difficult to determine, at which differences in degree add up to difference in kind. Thus *Imperialismus vor 1914*, while it makes real contributions to our knowledge of the period, must be added to those other important studies which await the findings of further research and reassessment.

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K. G. J. C. KNOWLES. *Strikes*. (Blackwell: Oxford. 1952. Pp. xiv + 320. 42s.)

'The striker', to quote Mr Knowles's first sentence, 'is unloved, unhonoured, and unsung; above all, he is largely unstudied.' Strikes have certainly not hitherto been studied as they might have been, considering the detailed statistics offered since 1911 by the Ministry of Labour, and it was an excellent idea of the Oxford Institute of Statistics to encourage Mr Knowles to devote a longish book to the subject.

The book starts with three useful chapters devoted to the Background. The first, on the nature of strikes, discusses the etymology of the word, the strategy and tactics of strikes and alternative forms of industrial warfare such as sabotage, boycotts or 'ca'canny'. The third chapter deals briefly with legal control and customary rules of the game in the conduct of strikes. The second chapter paints in the background factors inside Trade Unionism operating either to check or to generate and release militancy: changes in Union structure and function, such as expenditure on friendly benefits and the growth of a hierarchy of Union officials on the one hand; on the other, *unofficial* strikes, rank-and-file movements, breakaway Unions and outside influences such as Communist 'agitators'. Industrial militancy or pacifism are also seen to be affected by the employer's and the State's attitudes, and by joint, including tripartite, machinery.

So many books are cabined and confined to Trade Unions, that it is refreshing to have a discussion of the interaction between independent Union machinery and the machinery of joint consultation, mediation and arbitration, created, participated in, or imposed by the State, as regulator, or (in nationalized industries) operator. Mr Knowles presents the views of persons with such diverse sources of authority as Ellen Wilkinson and Professor Hicks, but keeps an independent attitude. Miss Wilkinson is quoted (pp. 92-3) on the lapsing of interest in Trade Unions when Trade Boards fix wages. Hicks is quoted (p. 65) as thinking, in 1930, that the increased coverage of negotiating machinery was likely to lead to larger-scale stoppages; yet as Knowles remarks, since 1930 'national strikes have hardly mattered at all'. The great reduction in time lost by strikes since 1926, Knowles attributes very largely to the top-level employer-worker collaboration initiated by Sir Alfred Mond (later Lord Melchett) and

Mr Turner. More could perhaps be said about the policy of the two great General Unions—the Transport and General Workers, built up by Ernest Bevin, and the Municipal and General Workers—Unions that cut across the ‘craft’ and ‘industrial’ text-book categories.

In tracing the background of strikes, Mr Knowles is in fact sadly handicapped by the virtual cessation of original research into Trade Union problems since the Webbs’ great work. They made it all too easy to quarry out text-books from *The History of Trade Unions* and *Industrial Democracy*, and the shadows of these great monuments seem to have discouraged or stunted new growth. We are all familiar, perhaps too familiar, with the new models of the nineteenth century; but painfully ignorant of the Trade Union models of the twentieth. The contrast with the vigour of contemporary American research into contemporary Trade Unionism is, indeed, shame making.

This handicap is evident again in Mr Knowles’s main chapters devoted to the causes and effects of strikes. He makes the fullest use, which a good statistical tactician and strategist could, of the comprehensive statistics provided by the Ministry of Labour. He deploys the data to show that strikes have been getting shorter and more likely to end in the employer’s victory, and moves easily from historical trends to analysis and correlation. He marshals the data to indicate such otherwise intangible properties as political apathy (p. 97), and works out proneness ‘ratios’ or quotients to indicate the ‘relative propensity’ to strike by different groups of people or for different reasons. These and other indices of ‘Unrest’ are then correlated to test an imaginative set of reasonable hypotheses, watch always being kept for the snares set by the multiplicity of factors. The outcome of strikes (compromised, or in favour of employers or of workers) is (pp. 260–1) correlated with the industry concerned. And the outcome is seen as a likely function of the factor ‘cause of strike’ as well as the industry. In mining, to take but one example, there was a relative propensity for strikes to be settled in favour of the workers. This propensity was largely due, however, to miners striking relatively frequently over questions of solidarity—a set of causes liable to be more successful than others. Besides the industry and the causes of strikes Mr Knowles also canvasses the regional factor. It appears that there is something in the reputed propensity of Welshmen, or at least South Welshmen, to strike. The ‘strike-proneness’ of the region (pp. 195–203) was highest of all the thirteen regions in mining and building, and it was second highest in metals, engineering and shipbuilding.

This admirably full exploitation of the statistics should, however, be supplemented with what American sociologists call ‘insights’. Mr Knowles has read keenly and often commented brilliantly, on the available wide range of books, pamphlets and articles; but he has not at hand, to help his work, much direct experience in the field. Many of the causal relations which he canvasses must remain empty boxes till direct questions and observation on the factory floor or in the Union office can fill them; and other relations may loom up as more important in the course of fieldwork. In the absence from British Universities, until the ‘Clapham Report’ era, of any sociology, social psychology or social anthropology, particularly as applied to labour, Knowles has given as good an analysis of strikes as can be looked for. It remains for the next generation of scholars to fill the empty boxes or to supply, as Sir John Clapham himself might have added, other boxes more to the purpose.

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E. L. HARGREAVES and M. M. GOWING. *History of the Second World War. Civil Industry and Trade.* (H.M.S.O. and Longmans, Green and Co. 1952. Pp. xii+678. 37s. 6d.)

Sir Keith Hancock, in his preface to this volume, explains that the problems here chosen for study are all primarily concerned with the activities of the Board of Trade in providing for the release of resources for the war effort and at the same time in ensuring to the civilian population an essential minimum of consumption goods. Within this large field fall export policy, price control, control over factory and storage premises and the control over the production and distribution of consumer goods (other than food). The authors faced a most difficult task, for the range of activities covered was immense and the problems intricate and subtle. Yet they have succeeded not only in providing a coherent account of the development of every phase of the Board's work during the war, but they have also skilfully brought out the close relationships that existed among these multifarious activities. The unity that underlay this diversity is clearly revealed. It is not to be expected that every Board of Trade official, recollecting in tranquillity a few yards of files out of the sixteen miles of them which (we are informed) comprise the war-time records of the Department, will agree with all that the authors have to say. This is doubtless true also of the business men who were at the 'receiving end' of the controls and who were not called upon to furnish evidence for the inquiry. Yet, as a faithful record of events the present narrative is not likely to be seriously challenged.

Apart from its value as a detailed record, the book points to conclusions of general interest. Since a war-time economy is a highly simplified economy in that it is guided by a single purpose, it might have been expected that planning would have played an important part in its construction. Yet what emerges clearly is that very few of the problems with which the Board had to deal were foreseen and that most of what was done had to be improvised at short notice. This is true of export policy no less than of internal policy. In the latter field the Board's 'role in a general anti-inflation policy remained unrehearsed' before the war. Similarly, the necessity to divert resources from the civilian sector gave rise to a succession of administrative measures which, in retrospect, can be seen to stand in logical sequence, but which were in no sense conceived or planned in advance of an immediate need. This may perhaps argue a want of imagination among the administrators, but a juster inference may be the impossibility of foreseeing developments in the ever-changing strategic situation of a world war. It is, however, more difficult to excuse the lamentable absence of up-to-date statistical information on the outbreak of war, for this seriously handicapped the early efforts of the Board to cope with the problems of war-time economic administration.

The authors have tried not merely to describe the various phases of policy but also to appraise the results. They conclude that on the whole the Board handled its affairs 'with a fair measure of success'. Some of their judgements are necessarily controversial. They recognize that these judgements 'spring from the backward gaze of history', but they have not always defined the standpoint from which their criticisms are made. Efficient economic administration in war-time demands, primarily, civil servants versed in industrial and commercial affairs, business men sensible of the requirements of a war economy, and politicians with a just appreciation of how far they can go in imposing austerity without endangering morale. None of these desiderata was present in the early part of the war. Indeed, a process of education was often necessary before the required

action could be taken, and this was an important factor in each policy as it was devised and applied. Any criticism which fails to emphasize this aspect of administration is incomplete. Further, the authors have not always distinguished in particular cases between the various causes that led to what they regard as errors in timing or failures in policy; for example, between those that can be ascribed to defects of judgement or knowledge on the part of civil servants, those that arose from a failure of ministerial nerve, and those that were dependent upon the temper of the public or some part of it. If these distinctions had been made explicit in framing their criticisms, the authors would have been on firmer ground than they sometimes appear to be when they come to express their very reasonable doubts whether the results were always 'commensurate with the administrative labour expended in achieving them'. But these objections must not be overstressed. The authors deserve every congratulation for the way in which they have carried out their major task of describing a great mass of intricate administrative operations.

G. C. ALLEN

University College, London

J. HURSTFIELD. *History of the Second World War. The Control of Raw Materials.* (H.M.S.O. and Longmans, Green and Co. 1953. Pp. xiv + 530. 35s.)

This volume is intended to elaborate a particular aspect of Professor Postan's general survey of *British War Production*. One other volume in the same series has already appeared—Mr Ashworth's *Contracts and Finance*—and six more are in the course of preparation.

Mr Hurstfield tells his story under three main headings: requirements, supplies, and organization. At each stage of the war there was always a number of raw materials, the supplies of which were expected imminently to become disastrously inadequate in relation to requirements, but for a variety of reasons the bottlenecks which actually materialized were remarkably few. One reason was simply that the forecast of requirements usually proved to be excessive: the requirement for a particular raw material would be calculated on a basis which overestimated the availability of complementary factors of production, so that when the time came the actual amount which consumers could absorb was not as great as anticipated. Another, though less common, reason was an over-pessimistic appraisal of the original supply position, so that actual supplies included an unexpected windfall. Finally, there were the numerous cases where successful action was taken to improve the supply position before a shortage became critical. Such action sometimes took the form of developing in this country new production capacity for the material in question or of providing acceptable substitutes. At other times it took the form of stepping up imports, despite the shortage of shipping and (prior to lend-lease) of foreign exchange. It is impossible to read Mr Hurstfield's narrative without being moved by the recurrent triumphs of ingenuity, industry and audacity over the inadequacy of our natural resources, the action of the enemy, and our own unpreparedness for the kind of war that we had to fight after Dunkirk.

In the sphere of organization Mr Hurstfield includes an illuminating discussion of the wisdom of allowing the raw material controls to be manned by personnel drawn from the trade in question. He also discusses the case for having more powerful machinery for directing the work of the controls (some of

which were practically autonomous) and the case for using simpler and more flexible machinery for co-ordinating Anglo-American supplies. All these matters are treated with remarkable clarity and fairness.

The only topic which receives inadequate attention is the machinery for distributing raw materials to consumers. Here Mr Hurstfield begins well, with a clear analysis of the merits of distribution by allocation, rather than by priority directive, but he says little about the relative merits of allocation on a departmental basis and on the basis of end use. One would have liked to learn more about these alternative methods of allocation, and to know which was preferable in different circumstances. Are there indeed cases where neither method operates efficiently? Take for instance the case of steel, where the consumption pattern is so complex as to set an almost impossible task to the distributing authority. The distribution scheme actually adopted during the war (operated on the basis of departmental allocations) was an acknowledged failure when re-introduced in peace-time: how well did it work during the war?

It would, however, be most ungenerous of me to labour further my one point of criticism, for this is a most readable, instructive and stimulating book—official history at its best.

BRIAN TEW

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SHORT REVIEWS

ROBERT DOUCH. *A Handbook of Local History: Dorset*. (University of Bristol. 1952. Pp. 140. 3s.) In a foreword to this volume the director of Adult Education in the University of Bristol explains that it has been planned to meet an increased demand for extra-mural courses in local history. The book consists of nineteen chapters and an index of places. Mr Douch, who is Tutor in Local History at the Southampton Institute of Education, has provided an excellently arranged and seemingly exhaustive guide to the printed materials for Dorset history. If anything, he has been too thorough, for he also includes general works like the *Oxford History of England*, which will presumably be repeated when the time comes for other counties to be dealt with on the same plan. The principle is sound, for local history cannot be written only from local knowledge; but there is some danger that the beginner may be intimidated by sheer abundance of material. If so, the danger can be obviated by oral instruction. When the student comes to write the history of his parish, his most pressing need is to know how much of the material he has assembled can safely be left out.

H. P. R. FINBERG

University College of Leicester

E. O. KUUJO. *Die rechtliche und wirtschaftliche Stellung der Pfarrkirchen in Alt-Livland*. (Helsinki: Annales Academiae Scientiarum Fennicae, ser. B. lxxix 2, 1953. Pp. 275.) This valuable new Finnish contribution to the history of medieval Livonia, based on detailed and original research, traces the development of the Livonian parish churches from the time of the German conquest to

that of the Protestant Reformation. The subject is closely connected with the rule of the Teutonic Order and its conflicts with the local bishoprics and the archbishopric of Riga to which most of Livonia belonged. There were many links with the church-life in Germany, especially northern Germany, and many influences which persisted into the post-Reformation period. Of special interest are the sections on the revenues of the church and of the parish priests and on the economic position of the clergy in an ecclesiastical principality.

F. L. CARSTEN

Westfield College, London

CARLO M. CIPOLLA. *Mouvements Monétaires dans l'État de Milan (1580-1700)*. (Librarie Armand Colin: Paris. 1952. Pp. 92. 300 fr.) This work, inaugurating a new series of the École Pratique des Hautes Études on *Monnaie-Prix-Conjoncture*, is a notable contribution to our knowledge of the monetary systems of the period. It is meant to interest both historians and economists, though the historian whose knowledge of monetary theory is limited will not find it easy reading. The factual core consists of statistics of the output of the Milanese Mint, derived from an eighteenth-century publication based on the original records. These are now lost, so that the inaccuracies which internal evidence compels us to suspect cannot be corrected. The statistics are conveniently tabulated in a series of appendices, and three short but powerful chapters outline a theoretical analysis of the monetary system and attempt to relate output fluctuations to movements of the Milanese economy as a whole. Economic historians will readily appreciate the value of this addition to our statistical knowledge of a period for which quantitative measurements are all too scarce. It is perhaps more difficult to assess Professor Cipolla's interpretation of the statistics. His chief conclusion is that there was no long-term correlation between production, prices and monetary output. The absence of such correlation is most clearly demonstrated by the figures for 1630 onwards, for while in that period the Milanese economy was suffering a process of drastic deflation characterized by falling prices and production, the output of the Mint was not only considerable (save in the 1630's), but increasing. This is only the most serious of several difficulties, however, for not a few of the year-by-year fluctuations of output, which were very marked, seem at first sight hard to explain in terms of Professor Cipolla's analysis. Again, while fluctuations in the exchange-value and output of *petite monnaie* receive considerable attention—this is the most original and valuable part of the analysis—changes in the gold-silver ratio and in the proportions in which the two metals were struck pass almost entirely unnoticed. One wonders whether more attention to this and to some other factors might have lightened some of the obscurities which remain: it is probable that in sixteenth- and early seventeenth-century England, changes in Mint prices, in the gold-silver ratio, and in rates of seignorage, and changes in the (effective) legal obligation to bring bullion to the Mint, together influenced output far more than did conjunctural movements. This analysis does not claim, however, to be final, and Professor Cipolla deserves our gratitude for an original and forceful contribution to the solution of a problem the main features of which are found well beyond the confines of space and time to which this book is restricted. As the author himself modestly insists, what is wanted now is a series of intensive studies of shorter periods in the light of which further theoretical advances can be made. For such research this work is one of the essential starting-points.

J. D. GOULD

University College of Leicester

MARIE LOUISE BERNERI. *Journey through Utopia*. (Routledge and Kegan Paul, 1951. Pp. xi + 339. 16s.) MARK HOLLOWAY. *Heavens on Earth. Utopian Communities in America, 1680-1880*. (Turnstile Press, 1952. Pp. 240. 16s.) In the past it was the habit of humanity, as Oscar Wilde noted, to look out and, seeing a better country, to set sail for that land of Nowhere; the modern lands of nowhere are where we are going if we *don't* look out. Our present utopias are no longer dreams but nightmares. But perhaps this reversal of roles is no matter for great wonder after all. For the Utopians of the past were mostly planners. They were confined to their studies and libraries until America was discovered. Even then they confined themselves to tiny communities. What has happened in the twentieth century is that they have been let loose on a big scale. So Nowhere is now somewhere, the New Atlantis is on the Ministry's files, The City of the Sun is an annual achievement of Corbusier, the voyage to Icaria is the Green Line to Crawley. It is therefore with something like nostalgic fascination that we approach the old Utopias where Nowhere was kept in its place. We could not wish for a better guide than Marie Louise Berneri, whose most untimely death in 1949 at the age of thirty-one deprived the world of what Lewis Mumford has very justly called a brave intelligence and an ardent spirit. Anarchist in her sympathies, she has left behind this book as her testament; it is an adequate tribute to her ability and perception as well as to her profound love of freedom. The Utopias she describes (and from many of which she gives well-chosen extracts—some of them her own translations from Italian and French originals) are of different kinds. Plato's Republic is marked by its orderly division of labour, whereas the ideal commonwealths of the Renaissance and the Enlightenment are lands where men find equal delight in manual and intellectual labour. Sir Thomas More's Utopia retains the family as a fundamental unit, but the family is often the main enemy of many writers. Each writer has his own hobby-horse which he rides with reckless abandon. With Campanella it is a monastic life devoted to scientific agriculture; with Gabriel de Foigny it is freedom from the discussions and disputes of religion; with Edward Bellamy it is industrial conscription for national service. What Miss Berneri shows is that while each Utopia is a satirical protest at something the writer found lacking in his own society, most of them share an authoritarian quality. The majority of Utopias are dedicated relentlessly to doctrines of efficiency or equality or order; even the Utopias of freedom sometimes have to force their citizens to the ways of freedom. The same variety within a common pattern is to be found in the actual Utopian communities which have been established. Mr Holloway has supplied an engagingly written account of American experiments in this direction. They were inspired at first by religious strivings for perfection—exhibited by the Labadists, the Rappites, the Zoarites and above all, of course, the Shakers. In the nineteenth century, perfection came to be sought in social terms and we have Owen's New Harmony and the rash of forty Fourier phalanxes. Experiments in education, in sexual relations, in property ownership and in production methods—all this and much more happened in the land of opportunity. But the world is not kind to Utopias and men themselves find the strain of perfection difficult to bear. 'Ideological discord, financial loss (or too great a measure of financial success), State interference and all the other pitfalls' which the little communities experienced are described by Mr Holloway with sympathy, for 'it is well of us', he concludes, 'that these examples exist, with all their faults and follies'.

W. H. MORRIS JONES

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Blundell's Diary and Letter Book, 1702-28. Ed. MARGARET BLUNDELL. (Liverpool: The University Press. 1952. Pp. xii + 271. £1.) This is a valuable source-book in the economics of Arcady. Nicholas Blundell, a young Catholic Squire of Crosby in Lancashire, was the eldest of fourteen children. Eight of his brothers and sisters survived infancy 'an unusual proportion for that century', which presented a difficult problem for the heir of an estate impoverished by war and the penal laws. His only remedy was in a lucrative marriage and this was satisfactorily arranged when he entered into a treaty for the hand of Mistress Frances Langdale and £2,000. He was now able to equip himself for his station which involved the purchase of a campaign perry wig and cloth for a suit for himself and his two grooms, a total outlay of £27, equivalent to the wages of nine indoor servants for the year, one of the many examples of the relative values in this old-world society. We now see him through twenty-six years playing the part of an active and benevolent country squire, taking part in the joys and sorrows of his tenants and neighbours, giving suppers to his Flax-breakers (with a local Heifetz playing the fiddle at 4s. for a single night's entertainment), arranging dances in his barn, cock-fights in his marl pit, praying at the death-bed of his servants and tenants, lending his coach-carriage to carry them to the church-yard, and putting a shoulder to the coffin himself. But he kept a sharp look-out for vagrants and the mothers of bastards, and took his little daughters to see them whipped. He was especially vigilant when it came to the important matter of marling. There were two teams of marlers, consisting altogether of fourteen men with twelve carts and they got out 754 loads the first day, 823 the second. They seem to have made a long day of it for he was with them himself 'soone after three of the clocke in the morning', and the work went on, apparently at this rate, for a fortnight, which goes to show that Adam Smith was not exaggerating when he said that men working under contract were in danger of doing themselves an injury. The neighbours came to see them at work and brought them presents; and when it was over, all joined in a sort of ritual triumph, with a sword-dance in the marl pit which was decorated with garlands and tinsel, the fourteen marlers appearing with 'a Particular Dress upon their Heads' and each carrying a musket! Day wages were from 6d. to 9d. besides meat and drink and lodging; a tooth-drawing cost a shilling; the bleeding of his wife—20 oz. from her foot—a shilling; we are not told what 'the wise woman' received for 'cutting an issue' and then a second 'issue' in the arm of little Mally—aged eight—to allow the evil humours to escape, nor what Dr Francis Worthington was paid when 'he pulled up some of the Hair of Mally's Head' for a skin eruption. Whatever it was, the Squire saved it by applying the same remedy himself to the younger daughter, Fanny. But these little girls could walk nine miles to a neighbouring Wakes where ladies and gentlemen ate apple dumplings for 5s., grinned through a horse collar for a piece of fat bacon and chased a soaped pig. The economics of Arcady admitted of frequent and jolly relaxations but has only faint encouragement for those who look for the conditions of economic growth. The squire kept his money 'in a bagg' or cautiously put it out at 5 per cent to solid yeomen in stock and crops; there was agricultural improvement when he had a new field skimmed and burned and sown with buck-wheat. The skimming took three men with a push-plough three months and they were paid £2. 12s. An enclosure was mooted but dropped owing to disagreement, and fat oxen reached the astonishing weight of half-a-ton. The propensities most in evidence were for reproducing, working, dancing, enduring and dying, but perhaps another instalment of this delightful diary might reveal the influence of the 'slow changing variables' which must soon have reached a village that was destined to become a suburb of Liverpool. And might we not have something from the Great Hodge Podge, with its odds and ends from Elizabethan to Victorian days, including a record of the marling carried out by five generations of Squires during a hundred and fifty years.

ARTHUR RAISTRICK. *Dynasty of Ironfounders: The Darbys and Coalbrookdale*. (Longmans, Green and Company. 1953. Pp. xii + 308. 30s.) This is a handsome tribute to a family and an enterprise whose names are household words with economic historians. Dr Raistrick's deep and sympathetic understanding of Quaker history and his knowledge of the technical processes of industry are reflected in both the arrangement and the merits of this book. He has chosen to treat his subject chronologically, discussing the fortunes of the concern under successive members of the Darby family from 1708 to 1851; reserving for separate attention such subjects as the furnaces and the foundries, the steam engine and the railway. The story which is thus unfolded is one of great interest. Its general outlines, after the discovery of coke-smelting, are not peculiar to Coalbrookdale, but are here recounted with a wealth of additional detail. There is the vast expansion facilitated by the acquisition of mineral rights; the growth of an integrated, almost self-contained, group of works, with ancillary services ranging from brickmaking to the ownership of boats and farms; the severe impact of Welsh competition on forge work at the beginning of the nineteenth century, when the adoption of Cort's invention forced a degree of specialization on the iron industry; and finally, the reorganization of the group consequent on the decline of mineral output from the older workings. What is new is the insight into the marketing of early foundry products; the dependence of the company upon loan capital (accentuated by a refusal, after a single lapse, to participate in the profits of munition production); and an admirable demonstration of the difficulties of, and the advances in, furnace and foundry practice in the eighteenth century. Valuable as all this is, the book, in general, excites rather than satisfies the interest of the economic historian. To some extent this is the result of a paucity of suitable evidence. But more attention might have been focused on the important economic factors governing the growth of Coalbrookdale and its associated enterprises. A more extended treatment of investment policy and the means by which such investment was financed, of the commercial relations between the Darbys and other ironmasters (Professor Ashton, for example, mentions an agreement with the Wilkinsons on prices in 1762), and more information on wages and works organization, would have been illuminating. As it is, the book is perhaps of most value to economic historians in its earlier chapters, which are also the most carefully written. It is, however, a human failing to desire more of what is good, and Dr Raistrick's book is a welcome addition to the economic history of this period.

A. H. JOHN

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Cumberland House Journals and Inland Journals, 1775-82. Second Series, 1779-82. Edited by E. E. RICH, assisted by A. M. JOHNSON, with an introduction by RICHARD GLOVER. (London: The Hudson's Bay Record Society, 1952. Pp. lxii + 313 + ix.) The second volume of the journals of Cumberland House and Hudson House covers the second half of the period from 1775 to 1782. Throughout this and the other journals the problems of the period are portrayed in the clear colours of men who made no conscious effort to achieve effect. The competition with the 'Pedlars' from Montreal for a limited number of furs was a dominating and persistent obstacle to the success of the London company. The ordinary affairs of the posts, including not least the mundane necessity of finding enough food and keeping warm in the winter, run through this as through all the company's journals. Amidst all the other worries came the small-pox. 'Indians I neither see nor hear of any being alive', wrote William Walker from Hudson House. 'I have not traded above 20 made Beaver since my last Packet.' It is interesting to note the apparent lack of apprehension felt by the traders that they might catch the disease, and even their readiness to help any

sick Indians that came their way. Here again, as in the first volume, is a story equally for the student of the period and for anyone who enjoys a restrained account of adventure.

G. DE T. GLAZEBROOK

Ottawa

W. B. CRUMP. *The Little Hill Farm, Calder Valley*. Revised by the Author in 1949. (London: The Scrivener Press, 7, Princes Street, Hanover Square, W. 1. N.D. Pp. 77. 6s.) 'Forasmuche as the Paryshe of Halyfaxe and other places theronto adjoyning, being planted in the grete Wastes and Moores where the fertilitie of Grounde ys not apte to bring forthe any Corne nor good Grasse, but in rare places, and by exceeding & greate Industrie of thinhabitauntes; and the same Inhabitauntes altogether doo lyve by Clothmaking... by meanes of which industrie the barreyn Groundes in those partes be nowe muche inhabited & above fyve hundreth Households there newly increased within theis fourty yeares past'—so runs the preamble to the Halifax Act of 1555. These little hill farms of Calderdale, the old parish of Halifax, 'raised by wealth won in the cloth trade', are Mr Crump's story. In the late eighteenth century, as in the sixteenth, clothmaking and farming still went hand in hand: 'there is scarcely a single instance in the whole parish of a man's living entirely by farming', wrote Watson in his *History of the Parish of Halifax* in 1775. If the coming of the mills reduced the farmer's share in clothmaking to a by-employment; if they caused him now to rely for his living on his farm; at the same time they brought his farming to its highest prosperity. In the early nineteenth century (the times of Charlotte Brontë's *Shirley*, and her Anglican school feast twelve hundred children strong) the Calder Valley and its upland villages were crowded with industries and crowded with people. The little hill farms fed them, with meat, eggs, butter, milk, oatmeal porridge and Halifax oatcake. So it continued to mid-Victorian times. 'Some time about 1870 or 1875, the little hill farm touched its zenith.' But railways drew industry down into the valley bottoms; combing, the last of the hand processes to survive, passed into the valley mills; industry dispersed through the hill villages was no more, and the hillside cottages were deserted. Cheap foreign wheat came in the 1880's, and cheap wheaten bread on the tables of Calderdale, instead of porridge and oatcake; and the farmers almost ceased to grow oats. Since those Victorian times, the prosperity of the little hill farms has fallen away. Such is the historical background which Mr Crump sketches. His book is not a history, but rather a natural history—the natural history of the vanished, or vanishing, farming life of the little hill farms. He describes, and illustrates, the farmhouses and their furnishings, the barns and buildings and tools, the ancient methods of haymaking, arable farming, turf-cutting and winning from the moor. This is the fruit of a lifetime's study under the open skies, and a lifetime's gathering of the knowledge of those who used the tools and farmed the land. In his young manhood, he tramped the moors and cloughs around Halifax; the last revision of his book, as his daughter tells in her foreword, was the work of his eighty-second year. The record endures, a commentary and exegesis on the tools which soon will survive only in museums, and the fields and farmsteads which stand upon the hills.

JOHN SALTMARSH

King's College, Cambridge

Jeremy Bentham's Economic Writings. Vol II. Ed. W. STARK. (George Allen and Unwin. Royal Economic Society. 1952. Pp. 458. 40s.) The second volume of Dr Stark's edition of Bentham's economic writings contains four works, written between 1794 and 1801, and all dealing with financial matters. The first, 'A Plan for Augmentation of the Revenue' (1794-5) is an attempt to persuade

the government to go into the business of life insurance. In Dr Stark's words, 'It is difficult to withstand the temptation to characterise this proposal as an early and primitive nationalization scheme'. It is chiefly interesting as an illustration of Bentham's willingness (in spite of a strong predilection for *laissez-faire*) to see the state intervene in economic affairs when there appeared to be good reason for it. The 'Proposal for the Circulation of a (New) Species of Paper Currency' (1795-6) and the 'Abstract or Compressed View of a Tract Intituled Circulating Annuities' (1800) present two rather similar schemes for the circulation of interest-bearing government notes. Bentham maintained that the government ought to have the monopoly of note issue, as it has of coinage; he believed that his government notes would drive banknotes out of circulation of themselves, but if this proved not to be so, he was quite prepared for either a tax on or an outright prohibition of, private issues. The second of the two schemes is much the more elaborately worked out, and forms the major part of the book. Dr Stark prints the 'compressed view' of the proposed tract, which Bentham sent to Nicholas Vansittart, together with some subsequent notes, comments by Vansittart and Sir Frederick Morton Eden and Bentham's replies. Bentham was bitterly disappointed at his failure to interest Vansittart in the plan, which he ascribed to the opposition of vested interests, especially the Bank of England. While still smarting from this rebuff, he discovered W. Anderson's pamphlet, 'The Iniquity of Banking', which Dr Stark shows to have exerted a considerable influence on him, and to have inspired the last work printed here, the incomplete draft of a pamphlet entitled 'Paper Mischief (Exposed)'. The papers are far from easy reading, but they contain a number of highly original ideas, and provide still further evidence of the remarkable power and independence of Bentham's mind. Perhaps their most interesting aspect is the evolution of their author's ideas about the relationship between the quantity of money, prices and real income. Starting from the view that there was little danger of an increase in the quantity of money producing an undesirable rise in prices, he became steadily more conscious of the evils of inflation. In a long note to 'Circulating Annuities', he analyses the circumstances in which an increase in the quantity of money will lead to a rise in employment and real income, and those in which it will merely produce a rise in prices. In many respects he is more successful than his contemporaries in producing a consistent theory of prices in a closed economy, though, surprisingly, external influences are almost wholly ignored. Dr Stark contributes a long and scholarly introduction, analysing each paper in turn and telling, with copious extracts from correspondence, the story of Bentham's many attempts to interest the Treasury in his plans. Altogether the book fully lives up to the high expectations which had been formed of it, and it leaves us to look forward all the more eagerly to Dr Stark's third volume.

E. VICTOR MORGAN

University College of Swansea

LIONEL ROBBINS. *The Theory of Economic Policy in English Classical Political Economy*. (Macmillan. 1952. Pp. ix + 217. 15s.) This is a useful and interesting work, even if one is inclined to think that some of the questions have been discussed before, sometimes more than once. Professor Robbins defends the old economists, in his third lecture, against the charge that they opposed the Factory Acts. They have been acquitted by Mr Sorenson, on the same charge, in a recent number of the *Journal of Economic History*. Neither author seems to have noticed that early in the present century, if not before, Alfred Marshall went carefully into the evidence and reached conclusions substantially the same, which he then buried, characteristically, in Appendix E of *Industry and Trade* (3rd edition, 1920). If one is disappointed with this book it is not, however,

because of the scholarship but because of its design. Far too much of the argument seems to be directed against critics of the classical economists who remain unmentioned and unknown. The late Lord Lindsay is mentioned and rebuked at one point. The Marxians and the German Historical School are lumped together in one passage while the German historical economists are referred to again in a footnote in language which strikes one as both unwise and ungenerous. On reflection, one comes to the conclusion that the critics so mysteriously hinted at have either never read or cannot understand the works of the classical economists and so need to be corrected on their attitude to factory law and similar points. Was this kind of critic really worth Professor Robbins's powder and shot? Well, possibly he was; for it is true that the growth of professional economic literature leaves little time for the study of the older books and that misconceptions about what writers actually said easily take root and flourish. But one would like to hear Professor Robbins on a different class of critic. If he is unwilling to try to force the line of German historical thinking, which proved such a barrier to the spread of British economic doctrine upon the Continent throughout the last century, there were other critics at home worth consideration. Was John Henry Newman correct, one has always wondered, in accusing Nassau Senior of mixing bad ethics with his good economics? Why did that impeccable liberal Lord Acton, who was a considerable if discriminating admirer of Adam Smith, urge his friend Gladstone in the 1880's not to return to the Scottish fountain-head but to dip himself in the waters of the Rhine? Why was Marshall, that intense traditionalist, so detached in attitude from his great predecessors? These are questions on which one would like to have the benefit of Professor Robbins's mature judgement. It is in relation to critics abroad and at home who could understand what they said and even appreciate their integrity but who differed from them in principle that the classical economists appear in their true perspective, as men who made a memorable contribution to a European debate on man and the economic organization of society.

W. H. B. COURT

University of Birmingham

JEAN VIDALENC. *Le Département de l'Eure sous la monarchie constitutionnelle 1814-48*. (Paris: Librairie Marcel Rivière. 1952. Pp. xix + 700. 1830 francs.) M. Vidalenc's comprehensive survey of political, economic, and social developments in the Eure Department is a valuable addition to our knowledge of France during the period of the Restoration and the July Monarchy. This admirable detailed study of forty-four years in the history of a single department—which is well illustrated and has some very useful maps—enables one to see in their proper perspective some of the over-simplified generalizations about economic and social developments in France in the first half of the nineteenth century. Those who stress the instability of French political institutions will find in M. Vidalenc's pages ample evidence of the stability of the local administrative machinery and of the social structure of the Eure Department. Those who think of France as a nation of peasant proprietors may read with profit M. Vidalenc's description of the great manorial estates and big farms in the Eure Department. And those who imagine that Napoleon bequeathed to France a fine network of main roads may be a little surprised at M. Vidalenc's description of the shocking state of communications in Eure in the early part of the period under review. The author gives a fascinating account of the early stages of industrialization in a region which in 1814 still had an almost medieval economic structure. But side by side with the many small handicrafts run on traditional domestic lines a few large modern enterprises developed—such as those controlled by the great cloth manufacturers J. B. Decretot and Ternaux of Louviers—while the

activities of Count Roy and Martin Duval afford an instructive example of the evolution of a local monopoly in the small-scale metallurgical industries. M. Vidalenc's scholarly investigation is a model of what a local history should be. It is to be hoped that the author will place scholars still further in his debt by extending his enquiries into the period of the Second Empire.

W. O. HENDERSON

University of Manchester

R. WILLERSLEV. *Studier i dansk Industrihistorie, 1850-1880*. (Copenhagen. 1952. Pp. 301.) This study had the purpose of finding whether Danish manufacture became industrialized in the period 1850-80. It has been the accepted view on Danish manufacture that a large expansion amounting to an industrial revolution took place in the early 1870's. Mr Willerslev insists that the increasing volume of output and the diversification of products since 1850 should be regarded as an incipient industrial revolution which merely became apparent in the boom-years of 1872-4. It was limited to the larger cities served by railways, and generally accompanied by a transition from handicraft processes to factory production often dependent on mechanical power. The causes for the progress of industrialization are seen in the state of the Danish capital and credit market which was then particularly buoyant, mainly as a result of English free trade. A rise in the price of agricultural exports coincided with a decline in the price of imported goods, and led to a favourable balance of payments. Capital for non-agrarian purposes accumulated as the then extensive agricultural system could not accommodate it all. At the same time, a reorganization of the Danish credit system through the formation of joint-stock and savings banks made saving attractive. These savings were made available at low rates to established industry, and the rise of industrial banking on the German model in the early 1870's led as well to credit extension for industrial promotion. Mr Willerslev's ideas thus follow very closely those developed in the third volume of Axel Nielsen's *Industriens Historie i Danmark*. No new thesis has been put forward in this study whose merit lies in a very detailed analysis of occupational distribution in industry and of financial institutions serving it.

H. S. K. KENT

Jesus College, Cambridge

SVEN GRÖNHAGEN. *Ekonomiskt Förlopp och Allmänna Val i Storbritannien 1850-1950*. (Lund, Gleerup, 1951. Pp. 104. 8 kr.) This book has been inspired by Professor Johan Åkerman's work on the relation between economic fluctuations and the results of Presidential elections in the United States ('Ekonomi och politik: Ekonomiska konjunkturer och politiska val i U.S.A., 1868-1944', *Ekonomisk Tidskrift*, 1947). Åkerman plotted economic and political indices for twenty Presidential election years, and found a high positive correlation between the upward or downward cyclical movement in the months before the election and the ruling party's popular vote relative to that of other parties. The analysis led to the reflection that after 1890 the course of economic fluctuations cannot be properly interpreted without giving prominence to the political data. In the book under review, Mr Grönham applies a similar technique to Great Britain in the period 1850-1950. He uses three political indices and seven economic indicators: the material covering all general elections in this country over the period was assembled by Mrs Ruth Brann, with the aid of a grant from the Swedish Social Science Council. After a preliminary historical survey of the elections we are given a statistical check designed to establish more firmly the conclusions suggested by qualitative analysis. It was found that for six of the elections, 1857, 1859, 1880, 1885, 1931 and 1935, the connexion between the

course of business conditions and the result of the election was well established. The evidence for the elections of 1892, 1923, 1924 and 1929 was not conclusive, although it did not contradict the hypothesis. On the whole the results were not as striking as those which emerged from the inquiry into American Presidential elections. The aim of this research and the methods devised are interesting; it deserves attention particularly from historians unaccustomed to using statistical analysis. The book ends by saying that there is a connexion between economic conditions before each election and the outcome of the election—a conclusion which many would regard as platitudinous. While it is doubtful whether there is much scope for the development of this line of inquiry, it has the merit of bringing a useful admixture of economic data to bear on the study of political history.

BRINLEY THOMAS

University College, Cardiff

WILLIAM ASHWORTH. *A Short History of the International Economy, 1850-1950*. (Longmans. 1952. Pp. 256. 18s.) This book is a very welcome addition to the small stock of text-books available to the student taking general courses covering European, American and international economic history. In the unfolding of his theme, Mr Ashworth is not concerned with a conventional approach through chapters on the economic history of the more important industrial countries. He adopts the more daring and refreshing method of showing how industrialism manifested similar features wherever it took root. By tracing out these processes of change, he builds up a picture of the international economic system as it existed before 1914. The latter part of the book is concerned with the fortunes of the system after that date. An approach to this theme along these lines presents a new and important perspective. Its weakness lies in the difficulty students will have in noting the contrasts as well as appreciating the similarities in the industrialization of individual countries. For purposes of comparative economic development, the book would need to be supplemented by the more detailed information to be found in other text-books. But to press such points too far is merely to say that different people would write different books under the same general title. We must be grateful that the one Mr Ashworth has given us is both very useful and thoroughly readable.

DAVID WIGHTMAN

University of Birmingham

Banking in the British Commonwealth. Ed. by R. S. SAYERS. (Oxford University Press. 1952. Pp. xviii + 486. 35s.) This book consists of a short introduction by Professor Sayers and a series of essays, by various authors, dealing with the main component parts of the Commonwealth. Rather more than half the text is formed by Mr J. S. G. Wilson's very detailed studies of Australia, India and Pakistan. I found the Indian chapters particularly interesting. The studies of the other Dominions are shorter and rather less detailed. Mr G. S. Dorrance discusses Canada; Professor G. A. Duncan, Ireland; Professor C. G. F. Simkin, New Zealand; Mr A. C. L. Day, South Africa; and Mr H. A. de S. Gunasekera, Ceylon. There is an admirable chapter on the colonies by Mr W. T. Newlyn and, finally, Mr P. Bureau has a stimulating but all too short chapter on the sterling area. The separate studies follow the same general pattern, though with considerable differences in emphasis. Each author gives a brief history of the growth of commercial banking in his country, with reference to the special features of its economy and to the relationships between banker and customer to which these features have given rise. This is followed by an analysis, with appropriate statistics, of the present structure and working of the banking system, and by a discussion of the constitution and functions of the central bank. The

book will be very valuable to students in that it contains a great deal of factual information, most of which is not easily available to the ordinary British reader. It is also valuable in emphasizing the diversity of economic institutions within the Commonwealth, and the influence which this has had on the development of the various banking systems. Perhaps the most interesting feature, however, is the discussion of central banking. As Professor Sayers points out in his introduction, the foundation of central banks has sometimes been a matter of fashion rather than economic necessity, and there has been too much of a tendency to transplant institutions modelled on the Bank of England into environments very different from that of London. For reasons which are very well analysed in these essays, all the Commonwealth central banks found the traditional instruments of control used by the Bank of England of only limited service, and all of them underwent a period of hesitancy and uncertainty before developing their own techniques appropriate to their respective environments. One could have wished that Professor Sayers had, himself, contributed a concluding chapter bringing together and analysing the conclusions which emerge from the respective studies, and also that he had insisted on greater uniformity and rather more detail in documentation.

E. VICTOR MORGAN

University College of Swansea

HEINRICH RITTERSHAUSEN. *Internationale Handels- und Devisenpolitik*. (Frankfurt am Main: Fritz Knapp Verlag. 1952. Pp. 448. DM. 24.50.) In the first chapter of this scholarly work Professor Rittershausen gives a clear account of the commercial policies of the chief trading nations of the world since the world economic depression of the early 1930's and he analyses the fallacies underlying this new 'mercantilist' policy. The author treads with a sure step through the amazing jungle of import duties, bounties, quotas, exchange restrictions, price regulations and freight discriminations, and shows how governments have repeatedly sacrificed consumers at the behest of business interests. He shows, too, how policies designed to benefit the home producer have sometimes had quite unexpected results and have recoiled on the heads of those who devised them. One curious feature of the commercial policies of the leading trading countries in the last quarter of a century has been that the more restrictive the policy the more loudly have governments protested their desire to promote greater freedom of trade. Time and time again the beneficent effects of a small but well advertised tariff reduction have been nullified by the imposition of some new exchange restriction. The author suggests that the tendency since 1945 to replace specific duties by *ad valorem* duties has increased the general level of tariffs without the public being aware of what was happening. He refers also to other methods of restricting international trade in such a way as to disguise the fact. Formerly a tariff might enumerate only two or three hundred classes of dutiable articles. Now goods are very precisely defined and the list of dutiable articles is much larger than it used to be. This greatly reduces the value of the 'most favoured nation clause'. A country claiming a concession under this clause soon discovers that the export in which it is interested is slightly different from the article upon which the concession is being made. Quarantine regulations concerning livestock have been used in such a way as to give additional protection to farmers at home. Professor Rittershausen's valuable introductory chapter is followed first by a more detailed analysis of (i) the nature and effects of tariffs and quotas, (ii) exchange regulations, and (iii) the arguments in favour of protection and free trade, and then by a consideration of recent attempts to 'liberalize' international trade and to solve the problem of the relations between advanced industrial states and backward under-developed countries.

W. O. HENDERSON

University of Manchester

C. H. ALEXANDROWICZ. *International Economic Organisations*. (London Institute of World Affairs. 1952. Pp. 256. 30s.) The author draws attention to the great variety of types of international organization that have been set up in the last hundred years. They vary from what may be described as quite informal 'gentlemen's agreements'—such as the gold standard before 1914 which was worked without establishing any formal central organization or conference at all—to highly complex pieces of international machinery. They include both government organizations and international agreements between private bodies. Professor Alexandrowicz's book will probably be of greater interest to international lawyers than to economic historians, for the author is more interested in the machinery of international co-operation than in the causes which have led to the establishment of such machinery or to the actual achievements of the organizations that he examines. The author's discussion of the origins of certain international economic organizations is sometimes very sketchy. The account of monetary unions omits all reference to the Austro-German monetary convention of 1857 which preceded the Latin Union by eight years. Nothing is said of the attempts in the second half of the nineteenth century to solve the problem of bounty-fed beet sugar which paved the way for the Brussels agreement of 1902. The important topic of customs unions is dismissed in a somewhat perfunctory manner without even mentioning the Zollverein of 1834–70. The contrast between Germany as 'the breeding ground of neo-mercantilism as well as of cartels' with the United Kingdom as 'the mother country of the co-operative movement as well as of western democratic institutions' is not a very happy one if the writer is implying that Germany made no significant contribution to the development of the co-operative movement.

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TERENCE ARMSTRONG. *The Northern Sea Route*. (Cambridge University Press. 1952. Pp. xiii+162. Scott Polar Research Institute. Special Publication number 1. 25s.) The hoped-for north-east passage from the Atlantic to the Pacific by way of the Arctic seas off Siberia defeated the technological resources of sailing-ship days and is a striking achievement of the two decades before World War II. Mr Armstrong presents a scholarly account of what has been involved in the opening-up of the Northern Sea Route. The interest and activity shown under the tsars was substantial if intermittent, being stimulated in some measure, after the Japanese victory of 1905, by the hope of a short and useful sea route to the Far East. Private enterprise before 1917, notably by British and Norwegian business men, who sought to bring into normal use the Kara seaway to the Ob and Yenisei estuaries, had some success. The major effort, however, awaited the considerable resources—of capital, technology and organization—which the U.S.S.R. was able and willing to divert. A special organization—Glavsevmorput—was set up to develop specified northern lands and to open up the sea route. There was perhaps an excess of haste; survey work and commercial operations were conducted concurrently rather than in the natural order. There were setbacks and highly dramatic episodes, but much was accomplished. The route was declared a normal commercial route and fuelled with Arctic coal in 1939; a network of small settlements to serve as ports of call and as weather stations has been set up; and, despite the arduous conditions, deposits of tin, gold, nickel and salt have already been worked for some years. The well-established warming up of the Arctic region since 1920 (pp. 39–40) has certainly favoured Soviet enterprise, although how long this may continue is unpredictable. If indeed, as Mr Armstrong believes, the prime motive of the U.S.S.R. has been economic, it is curious that the Kara route to Igarka on the

Yenisei—the easiest part of the route—is apparently so little used for the low-freight shipment of timber. Certainly the opening-up of the route has had propagandist value for the régime—but possibly the strategic aspect is more important than Mr Armstrong suggests. Among other things it clearly affords the means for the movement of warships to and from the Soviet Pacific. Mr Armstrong attempts to draw up the balance sheet of the Northern Sea Route. The credit account must include scientific gains, as well as metals, notably tin, a Soviet deficiency, and a through sea route, open for about two and a half months a year. The book is well illustrated with photographs and maps; and contains many statistical tables and a full bibliography. Mr Armstrong has not been able to carry his narrative much beyond 1945; transport data have been state secrets since a decree of 1947 (p. 115). Probably he could have gleaned more than he has (e.g. on mining activities) from a closer study of the post-war Soviet press, and reference should have been made to Major C. J. Webster's paper on the Soviet Arctic in *The Slavonic Review* of December 1950. The Taimyr nickel, referred to on p. 106, was being transferred in war-time as matte up the Yenisei to Krasnoyarsk, thence by the Trans-Siberian railway to Ural refineries.

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LIST OF BOOKS AND ARTICLES ON THE ECONOMIC HISTORY OF THE UNITED STATES AND CANADA

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INDUSTRIAL GROWTH IN THE MIDDLE AGES THE CLOTH INDUSTRY IN FLANDERS¹

By H. VAN WERVEKE

CLOTH was in the Middle Ages practically the only industrial product to be exported on a really large scale. The systematic manufacture for export began in Flemish towns at about the middle of the eleventh century.² Before then, cloth was made only for the home market and, in the first place, to supply the wants of the family; and this was very probably also the case all over western Europe. The so-called 'Frisian cloths', which we find mentioned during the Carolingian period, were sold outside their production area, but from the conditions of their manufacture we can deduce that cloth thus exported was merely the surplus output of a cloth woven for local wants only.

It was the increased demand for goods which brought about the sudden economic and social changes of the middle of the eleventh century, and the rise of an exporting cloth industry among them. At that time the land-workers left the countryside where they had hitherto lived in great numbers, to establish themselves in the immediate neighbourhood of merchants and to form settlements, which were unimportant at first, but from which the industrial cities of Flanders were to originate.

Before that time cloth-making had been an adventitious activity, to be exercised during the seasons when there was not much else to do; now it was made into a full-time occupation. Formerly no standards had been imposed; but from now on cloth was subjected to fixed conditions of quality and measurement, required for sale abroad.³

This revolution was not the result of a spontaneous growth of production, but originated in response to an increased demand for woollen cloth in

¹ Based upon a paper read at the Annual General Meeting of the Economic History Society, in April 1953.

² This date is suggested by some evidence for towns of Flanders and northern France (Arras, Cambrai and Beauvais). F. Vercauteren, *Etude sur les civitates de la Belgique Seconde* (Brussels, 1934), pp. 202, 229, 286.

³ H. Pirenne, 'La civilisation occidentale au moyen âge du XI^e au milieu du XV^e siècle. Le mouvement économique et social', in G. Glotz, *Histoire du Moyen Age* (Paris, 1933), VIII, 42. Reprint in H. Pirenne, *Histoire économique de l'Occident médiéval* (s.l., 1953), p. 196.

interregional and international commerce. The rise of the Flemish cloth industry cannot be accounted for without assuming the existence of a well-developed Flemish commerce in foreign countries. If in the ninth century the Frisians connected the Low Countries with the banks of the Thames and with western Germany, at the end of the tenth century their role was already to a great extent taken over, among others by the Flemish merchants. We find them mentioned not only in the tariff of King Aethelred, of about 1000, but also in that of Coblenz, which should be dated 1070 at the latest.¹

The continuously increasing demand of commerce during the following 250 years of expansion led not only to the development of the cloth industry in Flanders, but also to that of the Flemish towns, whose population eventually contained more than 50 per cent of the artisans of the cloth industry.² During the same period the grasp of the merchants on the industry became ever tighter. In the beginning they probably contented themselves with selling the wool to the craftsmen and with buying the cloth from them, but later they supplied them with the wool on credit, and eventually became real entrepreneurs, owners of the raw material during the several operations through which it progressed until it came back into their hands in the shape of a finished fabric. At this stage even the masters among the craftsmen were mere wage-earners, even when they in their turn had men working for them. In fact they owned only the implements of their trade; the raw material was not theirs.

This dependence of the urban industry upon the merchant-entrepreneur lasted till the end of the thirteenth century. Although during the following hundred years the decadence of the cloth industry set in, it still remained an important source of wealth for Flanders. But although the merchant-entrepreneur had now become to all intents and purposes a thing of the past, it should be kept in mind that even at this period of decline the industry could not have existed if it had not been built up by his capital and his activity in the preceding period.

Now it remains to answer the question why this industry was urban from its very origin. The causes were not self-evident, for some other industries of more recent dates, viz. the English cloth industry of the thirteenth century, the Flemish cloth industry of the sixteenth and the Flemish linen industry established themselves in the country. The establishment of the English cloth industry in the countryside can be ascribed to the generalized use of the fulling-mill, and need not be considered here.³ But the Flemish cloth industry of the sixteenth century and the

¹ F. Liebermann, *Die Gesetze der Angelsachsen* (Halle a. S., 1903) I, 232-3. *Hansisches Urkundenbuch*, I, 3.

² H. Pirenne, 'Les dénombrements de la population d'Ypres au XVe siècle (1412-1506)', *Vierteljahrsschrift für Sozial- und Wirtschaftsgeschichte*. Reprint in H. Pirenne, *Hist. écon. de l'Occ. médiév.* p. 483. H. Van Werveke, 'Het bevolkingscijfer van de stad Gent in de veertiende eeuw', *Miscellanea Van der Essen* (Brussels-Paris, 1947), I, 351.

³ E. M. Carus-Wilson, 'An Industrial Revolution of the Thirteenth Century', *Econ. Hist. Rev.*, xiv (1944), pp. 39-60.

linen industry were rural because wages were lower in the country than in the town. Why did this factor not operate in the medieval cloth industry? At the end of the thirteenth century the merchant-entrepreneurs made efforts to engage weavers and fullers from among the rural population and were only prevented from doing so by the opposition from the urban craftsmen. Why, then, did not their ancestors of centuries earlier do what the later merchant-entrepreneurs would fain have done in the thirteenth?

To get a clear understanding of the problem, I think it is necessary to compare the conditions under which the earlier urban industries and the later rural industries were working. Thanks to the elaborate work by Professor Coornaert on Hondschoote we are well informed about one of the main rural cloth centres in the sixteenth century. What strikes us is the part played by foreign capitalism. The Hondschoote production was stimulated by the demand from merchants of Antwerp, and also, but less, from those of Lille and Calais. Owing to these three groups of customers the Hondschoote cloth industry sprang into a vigorous life. Some of the merchants of the above-mentioned towns made occasional appearances at the small town to buy its serge, but generally they had on the spot middlemen, so called 'facteurs', who might or might not be resident at Hondschoote. Their business was to buy the fabrics from the 'drapiers', small entrepreneurs, no doubt independent employers, each of whom may have employed about three workers or apprentices on their looms.¹

If we compare these conditions at Hondschoote in the sixteenth century with those in the big Flemish towns in the thirteenth, we find that at Hondschoote the capital was in the hands of a number of individuals, whereas in the thirteenth century it was concentrated in those of the sole merchant-entrepreneur. In the sixteenth century the small employers, the 'facteur' and the merchant, were owners of distinct fractions of the industrial capital all in close connexion with one another.

The linen industry presented a similar picture. It was at the end of the fourteenth century, especially in the county of Hainault, that it began to be produced with a view to export. The weavers were countrymen who generally grew flax themselves and worked their own produce, or were in a position to buy it first hand. They used to carry their fabrics themselves to the neighbouring town, where it was sold to middlemen who in their turn supplied the merchants engaged in the export trade of linen to France, England, Spain, Germany and Italy.²

From these two examples we may draw the inference that this dispersal of capital along the several stages of production was essential for rural industry. It was as if it was too difficult for the merchants of the big towns to have direct commercial relations with rural centres, and themselves to reach the artisans scattered over the villages. Such an organization did not exist in the eleventh century, since it presupposes developed

¹ E. Coornaert, *Un centre industriel d'autrefois. La draperie-sayetterie d'Hondschoote (XIVe-XVIIIe siècles)* (Paris, 1930), pp. 27, 31, 318-24, 335, 354, 356.

² Et. Sabbe, *De Belgische vlasnijverheid* (Bruges, 1943), I, 293, 354.

commercial technique. Some kind of simple book-keeping was needed to secure each individual link his due share in the profit. And such book-keeping, though possible at the end of the Middle Ages, was not yet in existence in the eleventh century. It is quite certain, indeed, that before the middle of the twelfth century the merchants were not able to write, and could not keep written accounts.

In those early days all the transactions of business of the cloth industry and trade were managed by a few, clever, but quite illiterate, individuals. They could do their job because there were between them and the producers no intermediaries with whom they had to settle accounts. They could dispense with middlemen because they lived in the immediate vicinity of the craftsmen, and were not required to hunt for them all over the district. And this is the reason why it was necessary for the weavers and the fullers to settle in the town where the merchants had their residence. That the wages would be higher in the town was for the moment of less consequence, as, about 1150, competition was still unimportant and there was as yet no need to reduce production costs to the utmost.¹

The merchant-entrepreneurs who had grown rich constituted the leading class in their respective towns. Gradually this leading class developed into a close patriciate to which it became more and more difficult to gain access and which succeeded in monopolizing the governance of the towns. As the town council had appropriated the absolute right to regulate industry without any effective interference from the count, the whole legislation concerning labour and wages came to be inspired by the interests of the employers. In the thirteenth century there were no craft guilds which could, with strength and independence, defend the interests of the workers. It is true that, by the order of the authorities, the workers had to enlist in different corporate bodies of artisans, but that did not entitle them to elect the heads of their organizations. Their leaders were not craftsmen, and were thrust upon them by the town councils.²

This system, which might be called 'the patrician regime', probably reached its zenith at about 1270. At that time the era of expansion had not yet come to an end in western Europe. The trade of the Flemish towns was still active and very prosperous. The crisis in the political relations between England and Flanders which was later to lead to the complete destruction of the active Flemish commerce in England, had not yet started. The merchants of Ghent and of some other minor towns, still went in numbers to Rhineland or at least to Cologne, though the number of German merchants from this city who visited especially Bruges

¹ On the same problem, more extensively, see H. Van Werveke, 'Landelijke en stedelijke nijverheid', *Verslag Historisch Genootschap 1950* (Utrecht, 1951), pp. 37-51.

In my opinion, it is impossible to explain why the Flemish cloth industry of the Middle Ages was an urban one by the fact that the rural population was too much integrated in the domanial organization. In the Netherlands there is, for example, much evidence, as early as the tenth and the eleventh centuries, about workers of the building trade living in the countryside and yet economically very independent.

² On the origin of crafts in Flanders and Brabant, see C. Wyffels, *Het ontstaan der ambachten in Vlaanderen en Brabant* (Brussels, 1951). With French summary.

was increasing rapidly. In north Germany the activity of the Flemings was still of the greatest importance in 1288, when they secured in Hamburg a highly privileged position. There also the decay set in shortly after the beginning of the new century. Further south the commercial activity of the Flemish merchants was mainly concentrated in the fairs of Champagne where they could count on meeting their Italian counterparts. In 1277, Genoese galleys arrived for the first time straight from Genoa in the North Sea. A quarter of a century later, these visits and other developments were to lead to the final decline of the fairs.

But in 1270 the direct conditions necessary to the prosperity of the cloth industry were not yet affected, the supply of the raw material was still abundant, and if the competition of the English industry could already be foreseen, it had not yet reached the size it was to assume in the next century, and Italian competition was excluded so long as a regular trade of wool to the Mediterranean was not organized.¹

The power of the patriciate thus remained unshaken. It was only in 1275 that the Countess Margaret dared to intervene in order to extirpate the most crying abuses of the regime, and the first big revolt of the craftsmen against the old order only took place in 1280. So all continued well in Flanders.

But already in the first years of the fourteenth century the situation was completely reversed, two sets of causes continuing to undermine the position of the merchant-entrepreneurs. The first was the ruin of the active trade. Accidental circumstances, some of them of a purely political character, precipitated an evolution which had been in progress for some time. One of them was the relation between King Edward I and Countess Margaret of Flanders. Taking advantage of the rupture of relations between the two countries, the merchants of Brabant, northern Germany, Holland and Italy secured for themselves a position in the trade of wool and cloth which their Flemish colleagues were later unable to regain. Of what formerly were the five routes followed by their active trade, the Flemish only succeeded in maintaining control of the south-western one, viz. that to the Atlantic coast of France and Spain.²

Another event of far-reaching importance was the fall of the patriciate as a political power. This overthrow was achieved by the simultaneous action of the class struggle in the towns and of the policy of Count Guy of Dampierre in his war with King Philip the Fair of France.

The craftsmen, indeed, succeeded in the last years of the thirteenth century in securing for themselves a somewhat better position within the framework of the organizations imposed upon them by the town authorities. This evolution, which at that moment was still far from satisfying the claims of the artisans, turned into a sudden revolution after the brilliant victory of the Flemings in the famous battle of the Spurs at

¹ H. Van Werveke, 'Essor et déclin de la Flandre', *Studi in onore di Gino Luzzatto* (Milan, 1949), I, 152-60.

² H. Van Werveke, 'Der flandrische Eigenhandel im Mittelalter', *Hansische Geschichtsblätter*, LXI (1936), 14-20.

Courtrai in 1302. This battle meant not only the defeat of the King of France and a severe blow to his ambition, but it was at the same time the end of the exclusive rule of the well-to-do burgesses of the Flemish towns and of the patrician regime. The artisans, if they did not succeed in excluding completely their opponents, became at least the associates of their old masters in the government of the town. From now on they were in a position to influence and inspire labour legislation and eventually succeeded in securing a large degree of autonomy.

The destruction of the political power of the patricians at home, together with their eviction from the commerce abroad, accelerated their transformation as a social-economic type. The circumstances prevailing in the first period of the urban cloth industry demanded that the purchase of the raw material, the control of the industry and the sale of the finished fabric should all be concentrated in the same hands, partly because the insufficiency of their learning impeded their book-keeping. But in the course of time the merchants acquired the necessary education and from the moment they were able to keep their books, i.e. from the last quarter of the thirteenth century, this particular obstacle fell away.

The first signs of the function of the merchant-entrepreneur beginning to decay and to split up became visible as early as the middle of the thirteenth century, and, by the last quarter of the century, this process had already made some progress. Before long, owing to the eviction of the Flemish merchants from international commerce, the merchants had to content themselves with the part of entrepreneur.¹

This change coincided with a general economic revolution in western Europe which grew more and more unfavourable to the Flemish cloth industry. One of its signs was the arrival of the Italian galleys in the North Sea and their visits to England. From that moment it became possible for Florence to supply her cloth industry with first class wool, and she could henceforth produce cloth of superior quality. Competition from England also became keener and, what was even more ominous, the first signs of economic contraction showed themselves. For it is possible to prove that the decrease in volume of production of Flemish cloth began soon after 1320.²

This state of affairs produced a significant change in the history of Flanders which Pirenne, in his famous article, 'Les périodes de l'histoire sociale du capitalisme', was the first to point out.³ Faced with new and difficult problems which they could not master, members of families—whose ancestors had had in their hands for generations the direction of

¹ H. Van Werveke, 'De koopman-ondernemer en de ondernemer in de Vlaamsche laken-nijverheid van de middeleeuwen', *Mededeelingen van de Koninklijke Vlaamsche Academie. Klasse der letteren*, VIII (1946), no. 4, pp. 12–19. With French summary.

² H. Van Werveke, 'De omvang van de Ieperse lakenproductie in de veertiende eeuw' ('The size of the cloth-production at Ypres in the fourteenth century'), *Med. v. d. Kon. Vl. Acad. Kl. der lett.* IX (1947), no. 2, p. 9, correcting the figures and diagram of H. Laurent, *Un grand commerce d'exportation au moyen âge. La draperie des Pays-Bas en France et dans les pays méditerranéens (XIIe–XVe siècle)* (Paris, 1935), pp. 344–6.

³ *Bulletin de l'Académie royale de Belgique. Classe des lettres*, 1914. Reprint, H. Pirenne, *Hist. écon. de l'Occ. médiév.*, pp. 15–50.

the cloth industry—retired from business, unable to adapt themselves to the new situation. It is true that in the fourteenth century there appeared in several towns a new upper class, a kind of new patriciate; but, though it was partly composed of descendants of the former merchants, it had nothing to do with the cloth industry. The functions which had once been in the hands of the merchant-entrepreneur, were now distributed amongst individuals of several types: the foreign merchants, who mainly imported the wool and exported the cloth; the native wool- and cloth-mongers, who acted as intermediaries between the foreign merchants and the small industrial employers, and finally, the small employers themselves, a class which deserves a digression.

We saw that in the thirteenth century the direction of the cloth industry was in the hands of the merchant-entrepreneurs. Their business relations with the master-weavers, the master-fullers, the master-shearers, etc., were those of employers and employees. But in the middle of the fourteenth century, the situation was completely altered. The master-weavers now as a rule behaved as small entrepreneurs; they were often even called 'drapier'. Their job was to buy wool from wool merchants and to sell their more or less finished fabric to cloth merchants. In many cases, after having woven the cloth in their own workshop (or having had it woven), they distributed it to fullers or shearers for finishing. As a consequence the master-fullers and the master-shearers were now to the master-weavers in the relation of employees and employers, which meant that the master-weavers remunerated their services by paying them a wage. The latter had to be regulated according to a fixed wage-tariff, as alterations would influence the cost-price of the cloth and upset the profit balance of the 'drapier' or master-weaver. So the struggle between capital and labour, the wage conflicts (as there were fierce wage conflicts in the fourteenth century), were now always between the master-weavers on the one hand and the fullers and shearers on the other. Alterations in the rate of wages were demanded whenever the value of the money of account was substantially modified. This happened, for example, in the first years of the fourteenth century as a consequence of the money adulteration of King Philip the Fair, and again from 1337 onwards, when at the beginning of the Hundred Years' War, the Count of Flanders followed the example of the King of France in debasing the currency.¹

In the fourteenth century this antagonism between weavers and fullers in Ghent and in other Flemish towns took the shape of a violent struggle for political supremacy. By turns these two main groups of cloth-workers succeeded in sharing the town governance with the remaining groups of the population, i.e. the well-to-do burgesses and the so-called 'small craft guilds'—and in excluding their opponents from a leading part in town affairs.

Thus, if we pass under review by way of an example the numerous disturbances and revolts in Ghent, we cannot but be struck by the social

¹ H. Van Werveke, 'Currency Manipulation in the Middle Ages: the Case of Louis de Male, Count of Flanders', *Trans. Roy. Hist. Soc.* 4th ser. xxxi (1949), 115-27, especially 125-6.

character of many of the historical events. For instance, social conflict was behind the events of 1349, when the weavers were defeated, and again in the years 1359-61, when the situation was definitely reversed.

Yet other riots were of quite a different kind, for example, those of 1379 in Ghent. They have by more than one been compared, but wrongly in my opinion, with the riots of the Ciompi in Florence, which occurred at about the same time. There, in 1378, the Florentine wage-workers rebelled against the *lanaiuoli*, the Italian counterparts of the Flemish merchant-entrepreneurs of the thirteenth century. But in 1379 the burgesses of Ghent, the upper class, as well as the weavers, the fullers and the small crafts all together, rebelled against the Count of Flanders. They did not fight to secure better conditions of life and higher wages, but that their town should enjoy a greater autonomy. The struggle lasted six years and ended with a political compromise which changed nothing in social relations. Before the revolt the weavers had their share in the town government, while the fullers were excluded, and, after peace had been made, the situation remained exactly the same. No revolutionary movement succeeded in improving the general conditions of the cloth industry, nor could it prevent the gradual deterioration of it.

Such was the situation in the towns. But what happened meanwhile in the countryside? Owing to the illiteracy of the merchants, cloth had become in the eleventh century an urban industry. But from the moment they knew about book-keeping things became quite different. It is in 1179 that we hear for the first time of schools founded by the burgesses of Ghent. From that moment the merchants, or rather their children, had an opportunity to learn to read, to write and to reckon.¹ The consequences of this new acquisition manifested themselves in the course of the following century. It appears that between 1250 and 1300 numerous merchant-entrepreneurs had their weaving and fulling done not only in the town itself, but also in the suburbs and even in the surrounding villages, and that a real rural cloth industry was coming into existence.

Now that the factors which in the past had determined the rise of the urban industry had lost their effect, the lower wages paid for work in the country began to exert their influence and to operate in favour of rural cloth-making. This new state of affairs did not of course develop unhindered. As soon as the employers living in the towns dared to resort to man-power from the neighbouring villages, they at once experienced a strong opposition from the urban weavers and fullers; soon after the social revolution which had followed on the battle of the Spurs, the Count of Flanders at the instance of the three big towns, Ghent, Bruges and Ypres, promulgated a series of ordinances directed against the rural industry. The decisive measure in favour of Ghent was taken in 1314; Bruges and Ypres had to wait till 1322. Henceforth weaving and fulling

¹ H. Pirenne, 'L'instruction des marchands au moyen âge', *Annales d'histoire économique et sociale*, 1 (1929), 25-6. Reprint in *Hist. écon. de l'Occ. médiév.* pp. 564-6.

was forbidden in a large area around the three chief towns. In the eastern and northern parts of Flanders, dominated by Ghent and Bruges, not much room was left for the rural industry to develop in safety and the two towns saw to it that the ordinances were kept without the slightest infringement.¹ As a consequence, in the villages of these regions, not the cloth industry, but the linen industry developed and became a rural export industry, for the towns had no objection to that branch of activity.² In the south-western parts of Flanders, however, the situation was quite different. There large areas remained outside the radius of Ypres; and even in the neighbourhood of Ypres, the latter, being the weakest of the three towns, was not strong enough to enforce the prohibitions with the necessary vigour. It was owing to these circumstances that not only was the new cloth industry able to develop in the western rural parts of Flanders, but, from the fifteenth century on, it succeeded in outstripping the old urban industry. Its main centres were Hondschoote, Armentières and Neuve-Eglise. Hondschoote and Armentières were situated outside the prohibited area over which Ypres applied. Neuve-Eglise, on the contrary, was inside it, but, owing to exceptional circumstances, it had the good luck to be able to resist the interference of Ypres during more than a century.³

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¹ G. Espinas et H. Pirenne, *Recueil de documents pour servir à l'histoire de l'industrie drapière en Flandre* (Brussels, 1906-24), I, 562-4; II, 404-8; III, 744-6.

² E. Sabbe, *Histoire de l'industrie linière en Belgique* (Brussels, 1945), p. 5.

³ H.-E. de Sagher, *Recueil de documents relatifs à l'histoire de l'industrie drapière en Flandre. Deuxième partie. Le sud-ouest de la Flandre depuis l'époque bourguignonne* (Brussels, 1951), pp. 3-98.

PRICES, WAGES AND POPULAR MOVEMENTS IN PARIS DURING THE FRENCH REVOLUTION

By GEORGE E. RUDE

THE work of Labrousse on the movements of prices and wages in eighteenth-century France¹ has thrown a fresh light on the causes of the French Revolution and on the interests, motives and antipathies of the various social groups that participated in it.² His work, however, stopped short at 1789 and neither he nor any of his disciples has as yet extended the method used in the *Esquisse des Prix* and *La Crise de l'Economie Française* to the period of the Revolution itself. The present short study lays no claim to bridge this gap. It has the more modest object of examining, in necessarily general terms, the movements of prices and wages in Paris during the revolutionary years, 1789-95, and of relating these to the popular movements of the period. The choice of Paris for such a study has a certain value because of its pre-eminent role in events; but it has, also, the disadvantage of compelling one to rely on fragmentary evidence, as much of the relevant material was destroyed by fire during the civil war of 1871.³ Nevertheless, the various inquiries concerning prices and wages carried out by the Convention and the Committee of Public Safety between 1793 and 1795, summarized by L. Biollay,⁴ have provided a certain amount of material for 1790 and 1793. For the rest, it has been necessary to draw on excerpts from a variety of sources in the Parisian archives; on the work of d'Avenel⁵ and of Bienaymé, the latter based on the account-sheets of the Collège St Louis-le-Grand and of the Hôtel-Dieu;⁶ and, more extensively, on the reports of police agents for the years 1793-5, published by Caron and Aulard.⁷

For the purpose of this article, it will be convenient to divide the revolu-

¹ C.-E. Labrousse, *Esquisse du Mouvement des Prix et des Revenus en France au XVIIIe Siècle* (2 vols.; Paris, 1933); *La Crise de l'Economie française à la Fin de l'ancien Régime et au Début de la Révolution* (Paris, 1943).

² See G. Lefebvre, 'Le mouvement des prix et les origines de la Révolution française', *Annales Historiques de la Révolution Française*, xiv (1937), 289-329.

³ Thus, for example, in the series F²⁰ (Statistique) in the Archives Nationales, extensively used by Labrousse, there are no materials for Paris.

⁴ The Departments' replies to these inquiries are to be found in the Archives Nationales, series F¹², nos. 1546-7 (*Enquête de juin 1793*), 1544 (*Enquête de l'an 2*), 1546 (*Enquête de l'an 3*). It was on the basis of these returns and of the *maximum des salaires*, published by the Paris Commune on 23 July 1794 (Arch. Nat. AD II/B (i)), that Biollay compiled his useful work, *Les Prix en 1790* (Paris, 1886), on which I have largely relied for prices and wages in 1790 in the course of the present study.

⁵ G. d'Avenel, *Histoire Économique de la Propriété, des Salaires, des Denrées et des Prix depuis 1200 jusqu'à 1800* (8 vols.; Paris, 1898).

⁶ G. Bienaymé, 'Le coût de la vie à Paris à diverses époques', *Journal de la Société de Statistique de Paris*, xxxvi (1895), 57-68, 355-60; xxxvii (1896), 375-90; xxxviii (1897), 83-90; xxxix (1898), 369-82; xl (1899), 366-85; xlii (1901), 293-310; xliii (1902), 87-103.

⁷ P. Caron, *Paris pendant la Terreur. Rapports des agents secrets du Ministère de l'Intérieur* (3 vols.; Paris, 1910, 1914, 1944); A. Aulard, *Paris pendant la Réaction Thermidorienne et sous le Directoire* (5 vols.; Paris, 1898).

tionary period¹ into five parts, each characterized by its own distinctive features, and to trace within each of these periods the movements of prices and wages and of social unrest.

1. *The year 1789*

In the first place, we must note the importance that Labrousse ascribes to bread as an article of popular consumption in the eighteenth century. According to his calculations, over the whole period 1726-91, the wage-earner's expenditure on bread averaged 50 per cent of his budget; in the acute years of economic crises, 1788-9, it rose to an average of 58 per cent; in the months of famine and top-level prices of 1789, it soared to the fantastic figure of 88 per cent.² From this follows the constant popular concern for the price and supply of bread.³ We shall see that, later in the Revolution, because of the particular measures taken by the National Assembly and the city authorities,⁴ bread was to cease in Paris to loom so large as a matter of constant concern and as an issue of social unrest. But in the year 1789, Paris was, in this respect, no different from the rest of the country and the price of bread dominated all other considerations in the popular mind: it is, in fact, no mere coincidence (as Lefebvre and Labrousse have both pointed out) that the Bastille should have fallen on the very day that the price of grain throughout France reached its cyclical peak.⁵ It is, therefore, proposed, considering the year 1789, to examine first of all the fluctuations in the price of bread.⁶

The price of a 4 lb. loaf of bread, which had been 9 sous⁷ in August 1788, had risen by stages to 14½ sous in February 1789. It remained at this phenomenally high level until 22 July, when it was reduced to 13½ sous; on 8 August it was further reduced to 12 sous and remained at this figure

¹ The date selected for the closure of the revolutionary period is bound to reflect the particular concern of the historian. As I am here concerned, not with the political events of the Revolution in themselves nor with a purely statistical treatment of prices and wages, but rather with the latter in relation to popular movements, it is perhaps permissible to end this study at the point where the last of these popular movements takes place—i.e. in Prairial of the year 3 (May 1795), when the Parisian *sans-culottes* were finally and decisively defeated.

² Labrousse, *Esquisse du Mouvement des Prix*, II, 597-608.

³ Labrousse calculates that, for the period 1726-91 as a whole, whereas the average wage-earner spent 50 % of his budget on bread, he spent 16 % on vegetables, fats and wine; 15 % on clothing; 5 % on fuel; 1 % on lighting (Lefebvre, *op. cit.* p. 315).

⁴ These measures were not wholly a product of the Revolution. According to Bailly, 18,000 livres per day were being spent in June 1789 in order to prevent the price of bread from rising above the already dangerously high level of 14½ sous for the 4 lb. loaf (*Mémoires de Bailly* (Paris, 1821), II, 96). For further details, see S.E. Harris, *The Assignats* (Harvard Univ. Press, 1930), pp. 133-4. I have drawn extensively from Harris's book in this study.

⁵ Lefebvre, *op. cit.* p. 324.

⁶ It will be observed that no attempt is made in this study to measure the earnings of any other section of the Parisian *menu peuple* than the wage-earners, who, with their families, accounted perhaps for one-half the total population (cf. F. Braesch, 'Un essai de statistique de la population ouvrière de Paris vers 1791', *La Révolution Française*, LXVII (July-Dec. 1902), 289-321). Labrousse has pointed out that all small income-earners of town and countryside were similarly affected by the economic crisis that ushered in the Revolution (*La Crise de l'Economie Française*, pp. xlv-xlv); and the close identity of interest of the various sections of the Parisian *menu peuple*—wage-earners, independent craftsmen, small shopkeepers and workshop masters—in the face of food prices and the large producer may perhaps be taken for granted.

⁷ It should be noted that 1 *livre* = 20 *sous* and 1 *sou* = 12 *deniers*.

until the end of the year.¹ From August till early November, owing to a dearth of flour, it was in almost constant short supply and, during this period, it was the scarcity and poor quality of bread, rather than its price, that were the constant target of popular discontent.² Sharp upward movements in the price of flour and bread had been a frequent feature of eighteenth-century life,³ but these 'famine' periods had usually been of short duration. What was new about the situation revealed in these figures was its protracted nature. The appalling consequences that they entailed for the bulk of the Parisian population will be the better realized when they are seen in relation to the wages of typical groups of wage-earners.

The following table, in which we have assumed a normal daily purchase of a 4 lb. loaf by the average employed male worker for himself and family,⁴ illustrates the percentage of actual daily income spent on bread by selected groups of workers at the various prices given above:

Table 1. *Percentage of income spent on bread by Parisian workers in 1789*

Occupation	Daily* wage	'Effective' daily earnings†	Expenditure on bread as percentage of income			
			At 9 s.	At 14½ s.	At 13½ s.	At 12 s.
Labourer in Réveillon's factory	25 s.‡	15 s.	60	97	90	80
Builder's labourer	30 s.	18 s.	50	80	75	67
Journeyman mason	40 s.	24 s.	37	60	56	50
Journeyman locksmith, carpenter, etc.	50 s.	30 s.	30	48	45	40
Sculptor, goldsmith	100 s.	60 s.	15	24	22½	20

* Wages given here, unless otherwise stated, are from Biollay, *op. cit.* pp. 14-79. Nearly all these, for lack of other evidence, are for 1790. What material there is for 1789 suggests, however, that the differences between the two years are very slight. A notable exception is the case of the journeymen tailors who, in August 1789, obtained an increase of 10 sous per day by concerted action (Hardy, *Journal*, viii, 438-9).

† In computing 'effective' earnings, allowance has been made for the numerous unpaid Feast Days of the *ancien régime*. Here these are assumed to number 111 per year (G. M. Jaffé, *Le Mouvement Ouvrier à Paris pendant la Révolution Française* (Paris, 1927), pp. 26-7). Further allowance should also be made for sickness.

‡ *Exposé justificatif pour le sieur Réveillon, Entrepreneur de la Manufacture Royale des Papiers*, F. St. Ant., Bib. Nat. Lb³⁹ 1618.

¹ Prices of bread are taken from *Observations d'un citoyen habitant de Paris et membre du Tiers* (Bibliothèque Nationale Le²⁴ 256) and from Hardy's MS. journal, *Mes Loisirs, ou Journal d'événements tels qu'ils parviennent à ma connoissance* (Bib. Nat., fonds français, 6680-7), viii, 408, 426.

² Hardy, *Journal*, viii, 420 et seq.

³ Cf. Labrousse, *op. cit.* Introduction; cf. also constant references in the *Journal et Mémoires du Comte d'Argenson* and the *Journal* of E. J. F. Barbier (for the period 1725-59).

⁴ A. Tuetey estimates for the same period a daily consumption of 6 lb. for a worker with wife and three children (*L'Assistance Publique à Paris pendant la Révolution* (4 vols.; Paris, 1895-7), vol. 1, p. cxxvi). In March 1795, the National Convention prescribed a ration of 1½ lb. of bread for each worker and 1 lb. for all others (*L'Ancien Moniteur (Réimpression)*, xxiii, 701); but this was at a time when the consumption of bread (though often in short supply) had risen owing to a heavy shortage of other consumer goods, e.g. meat (Harris, *op. cit.* p. 154). If, for the period under review (one of shortage and high bread-prices), we allow an average daily consumption of 1 lb. per head and assume that the average male worker had a wife and two dependent children (cf. Braesch, *loc. cit.*), the lower figure of a 4 lb. loaf per day will appear reasonable.

It will be seen that, at the high price prevailing in the summer months, even a comparatively highly-paid journeyman, such as a locksmith, was spending little short of half his actual income on bread; only the highly skilled journeymen in luxury trades were able to maintain a reasonable balance for other essentials. These figures cannot, of course, all be taken at their face value: it is not possible to imagine, for example, that, in actual fact, a Réveillon labourer would, for months on end, be able to spend 97 per cent of his income on bread: he would almost certainly have to pay 3 sous a day for his lodgings (accounting for 20 per cent of his 'effective' daily earnings),¹ not to mention his necessary minimum expenditure on clothing, drink and other foods. He would, therefore, be forced to go hungry rather than buy his full quota of bread. Further, there were periods, particularly after August, when the shortage of supplies made it impossible to maintain one's normal consumption;² at other times, the bread was of poor quality and rejected by many as inedible.³ But, even with these reservations, it may be claimed that these figures are highly significant and help to explain the desperate plight and angry mood of the Parisian wage-earners and small craftsmen and shopkeepers (whose earnings were not appreciably higher than those of workers) at the outbreak of revolution.

Neither space nor the materials makes it possible to deal here with all other items of the household budget; nor, indeed, does the overwhelming significance assumed by bread during this period make it necessary; yet a word must be said about wine, which probably ranked second in importance.⁴ A litre of ordinary wine appears to have cost about 10 sous⁵ in 1789; half of this was accounted for by tax.⁶ It is evident that, at this price and at the prevailing high cost of bread, few wage-earners could afford to buy even the comparatively modest quantity of one litre per day for their households; and it is, therefore, not surprising that there should have been such an outcry against the *barrières*, or internal customs posts, and that Parisians should have participated so eagerly in their destruction by fire on the nights of 11–14 July;⁷ and it is certainly significant that among those destroying the post at Chaillot on 13 July was a locksmith who was reported as saying, 'nous allons boire le vin a trois sols'.⁸

It was, however, the high price and the scarcity of bread which acted as the main stimulant to the popular movements of the year 1789. This

¹ Biollay gives 1–5 sous as the price of cheap lodgings in 1790 (*op. cit.* p. 488). Police records that I have seen usually quote 2–4 sous for 1789–91.

² See Hardy, *Journal*, viii, 348, 378, 460. On 1 September, Hardy was only able to obtain 'la moitié d'un pain de 4 livres, ayant fort mauvais goût'.

³ *Ibid.* pp. 383, 460.

⁴ According to Lavoisier, the average annual expenditure of the Parisian on wine accounted for 15 % of his total budget and for 25 % of his expenditure on food alone (Bienaymé, *op. cit.* xxxvi, 62–3).

⁵ I have found no precise figure for 1789. A price of 10 sous appears likely in view of (a) Bienaymé's figures for 1771–89, suggesting a wholesale price in 1789 of about 8½ sous per litre (*op. cit.* xxxvi, 383); (b) the price of 10 sous per *pinte* (= 0.93 lit.) of wine in June 1790 (*Enquête de juin 1793*, Arch. Nat. F¹² 1547^c, doss. 2).

⁶ Bienaymé, *op. cit.* xxxvi, 383.

⁷ Arch. Nat. Z^{1a} 886.

⁸ *Ibid.* This appears to have been a highly optimistic forecast, as we shall see later.

appears from the expressions of contemporary observers, the depositions of witnesses and the statements made by persons wounded or arrested in these events.¹ The high price of bread appears as an important motive in the riots of 27 and 28 April in the Faubourg St Antoine, when journeymen and labourers destroyed the property of the manufacturers, Réveillon and Henriot;² it appears again in the continuous agitation in the Faubourg St Antoine between May and July;³ and, though the Paris insurrection of 12–14 July had as its culminating and most spectacular episode the seizure of the Bastille, it included such 'economic' measures as the removal of corn from religious houses and the refusal to pay duty on goods passing through the *barrières*.⁴ Above all, the protracted shortage of bread appears as the dominant consideration in the continuous social movements in markets, at City Hall and bakers' shops in August to November and in the march to Versailles, which brought the royal family ('le boulanger, la boulangère et le petit mitron') back to the capital in October.⁵ It is also not without significance that the reduction in the price of bread from 14½ to 13½ sous on 22 July should have coincided with the lynching of Foulon and Berthier⁶; and that the further reduction to 12 sous on 8 August should have immediately followed large demonstrations of housewives outside the City Hall.⁷

There were, in addition, during August and September, independent movements of wage-earners—bakers' assistants, journeymen wigmakers, tailors, domestic servants, shoemakers and apothecaries—for work, wages, or improved working conditions; but, with the exception of the tailors, who obtained a wages increase of 10 sous,⁸ they received short shrift from the employers and authorities.⁹ The wage-earners of Paris won some concessions as regards the price and supply of bread (the latter after October), but they won little, or nothing, in terms of their nominal wages.

2. November 1789–September 1791

This period, in sharp contrast with the preceding, was one of stable or falling prices, of stable currency¹⁰ and wages. While unemployment still persisted in the former luxury trades,¹¹ it was a period of general

¹ The most important sources for these are Hardy's *Journal* and the *procès-verbaux* of the *commissaires au Châtelet* (Arch. Nat., series Y). ² See Hardy, *Journal*, viii, 299.

³ *Ibid.* pp. 310, 344 *et seq.*

⁴ Arch. Nat. Z^{1a} 886; Z² 4291.

⁵ For details of these movements, see my article, 'La composition sociale des insurrections parisiennes de 1789 à 1791', *Ann. Hist. de la Rév. Franç.* no. 127 (July–August 1952), pp. 256–88.

⁶ Hardy, *Journal*, viii, 401.

⁷ *Ibid.* p. 426.

⁸ See p. 248, note to Table 1.

⁹ For these movements and the hostile attitude of the authorities towards them, see S. Lacroix, *Actes de la Commune de Paris pendant la Révolution Française* (1st series, 7 vols.; Paris, 1894–8), i, 123–4, 265, 381, 416, 547. See also Hardy, *Journal*, viii, 434, 438–9, 455; and Jaffé, *op. cit.* pp. 65–73.

¹⁰ For the stability of the newly-created paper-money, the *assignat*, during this period, see Harris, *op. cit.* pp. 166–71.

¹¹ In June 1791, there were 31,000 unemployed in the Parisian *ateliers de charité* (C. Bloch and A. Tuetey, *Procès-verbaux et Rapports du Comité de Mendicité de la Constituante, 1789–1791* (Coll. des docs inédits sur l'Hist. écon. de la Rév. Franç. Paris, 1911), p. 278); and, in October, 64,000 livres were distributed in alms to 118,184 poor and destitute Parisians (Bib. Nat. nouvelles acquisitions françaises 2656, fos. 342–3).

business prosperity and, in a number of Parisian trades, of a shortage of labour.¹

The price of the 4 lb. loaf, after long remaining at its new 'normal' level of 12 sous, was reduced to 11 sous in June 1790; after which controls were removed. In the autumn of that year, the prices fell to 9 sous and, later, to 8 sous, where it appears to have remained for the greater part of 1791.² In August 1791, however, owing to a bad harvest and the bakers' shortage of flour, the price of bread again rose sharply and, in September, the 4 lb. loaf was once again selling at 12 sous or more.³ Yet, if we consider the period as a whole, it is clear that the wage-earner's position, even though nominal wages showed no appreciable increase,⁴ was substantially improved in comparison with 1789. His position was further improved during 1791 by the reduction—short-lived though it proved to be—in the price of a number of other essential goods, including wine. This came about through the abolition of the *droits d'entrée* with the closure of the *barrières* in May 1791. Consequently, the price of a litre of wine appears to have fallen from 10 to 8 sous;⁵ firewood, which also accounted for a substantial proportion of the wage-earner's budget,⁶ was reduced from 22½ to 17 livres per *voie* (56 cubic feet);⁷ the price of butter was reduced by one-quarter and that of sugar by somewhat less.⁸ The price of meat, however, owing to a persistent shortage of supplies to the market, retained its high price of 10 sous per pound.⁹

The improvement in the living standards of the wage-earners resulting from these changes may be illustrated by comparing the hypothetical budgets of groups of workers in 1789 with those in 1791 (Table 2).

¹ See the speech of de Liancourt, *rapporteur* of the Comité de Mendicité, to the Assembly in June 1791: 'Le commerce reprend une grande vigueur. . . les maîtres ouvriers, notamment ceux de la capitale, se plaignent de ne pouvoir trouver des compagnons. . .', etc. (Bloch and Tuetey, *op. cit.* p. 730).

² Prices are from *L'Ancien Moniteur (Réimpression)*, ix, 439; and from Biollay, pp. 103-4.

³ S. Lacroix, *op. cit.* 2nd series, vi, 455-63. None of these documents give the figure to which the price of bread actually rose. I have, therefore, had to assume an upper limit—12 sous—which appears reasonable in relation to the rise in the price of flour: from 38 livres per sack on 1 July to 54 livres on 14 September (Lacroix, *op. cit.* 2nd series, vi, 459).

⁴ There were considerable wages movements involving a number of trades in the spring and summer of 1791 (see p. 252, below), but it is doubtful, in view of their hostile reception by the Municipality and the Assembly, if they had an appreciable effect on the level of wages. The journeymen carpenters were, it is true, able to compel the majority of the masters to agree to pay a minimum wage of 50 sous per day (*Révolutions de Paris*, no. cxvi, 7-14 May 1791), but this figure is identical with that given in the *Enquête de juin 1793* for 1790 (Biollay, p. 17). It is possible, therefore, that the outcome of the carpenters' strike was the more general application of a wage already paid to the 'best' workers rather than a general increase. It should be remembered, of course, that there was as yet no general acceptance of the principle of 'the rate for the job'.

⁵ This figure is put forward tentatively, being based on the uncertain evidence of a journeyman hatter, arrested on 2 May 1791 for abusing Lafayette (Archives de la Préfecture de Police, series Aa, no. 56 (Arcis), fo. 134).

⁶ Labrousse allows 5 % for fuel in his wage-earner's average budget for 1726-91 (see p. 247, n. 3, above), but this is for the whole of France. Lavoisier's estimate of 10 % for the average Parisian (Bienaymé, *op. cit.* xxxvi, 62-3) would appear to be more appropriate.

⁷ Cf. Bienaymé, *op. cit.* xxxvii, 389.

⁸ Cf. Biollay, pp. 167, 288. Other essentials subject to the *droits d'entrée* up to May 1791, but more lightly taxed, were eggs, cheese and tallow candles (*ibid.* pp. 172, 176, 296).

⁹ The Paris Council attributed this to the competition of the *mercandiers*, 300-400 of whom operated in the meat market at this time (Lacroix, *op. cit.* 2nd series, ii, 129-33).

These trends are, not unnaturally, reflected in the popular movements of 1790-1. There was no flicker of any public agitation about bread until mid-August 1791 when, as we have seen, a shortage of flour sent the price of the 4 lb. loaf soaring upwards again. Disturbances followed in different parts of the city and the mayor, Bailly, was threatened with 'la lanterne'

Table 2. *Hypothetical budgets of Parisian workers in June 1789 and June 1791*

Budget of a builder's labourer (wage: 30 s.; 'effective' income: 18 s.)				Budget of a journeyman carpenter, locksmith etc. (wage: 50 s.; 'effective' income: 30 s.)			
June 1789		June 1791		June 1789		June 1791	
4 lb. bread	14½ s.	4 lb. bread	8 s.	4 lb. bread	14½ s.	4 lb. bread	8 s.
Rent	3 s.	Rent	3 s.	Rent	3 s.	Rent	3 s.
		½ litre wine	4 s.	½ litre wine	5 s.	1 litre wine	8 s.
		¼ lb. meat	2½ s.	½ lb. meat	5 s.	½ lb. meat	5 s.
Balance for oil, vege- tables, clothing etc.	½ s.	Balance	½ s.	Balance	2½ s.	Balance	6 s.
Total	18 s.		18 s.		30 s.		30 s.

in the corn market and was forced to beat an ignominious retreat;¹ while, on the following day, a button-maker was arrested for saying, 'il nous faut le pain français à deux sols ou se battre'.² In the early months of the year there had been, besides, a continuous agitation among 'smugglers' and unemployed directed against the customs posts; this, of course, came to an end with their closure in May.³

The major social disturbances of the period, however, took the form of agitation of the unemployed for work schemes, of wages movements and political demonstrations, rather than of food riots. The unemployed workers were threatened with destitution by a decision of the Constituent Assembly in June 1791 to close down the *ateliers de charité*, and they vigorously protested by street demonstrations and petitions.⁴ During the spring and summer of the same year, carpenters, farriers, printers and others (their numbers were said in a petition of the master farriers to total 80,000) struck work, or otherwise demonstrated, for higher wages—a movement that afforded the Assembly the pretext for legislating the *Loi Le Chapelier*, banning trade associations, in June.⁵ The political movement in the summer of 1791 was inspired and guided by the Cordelier Club and

¹ *Le Journal de la Révolution*, no. 391, 7 September 1791; Lacroix, *op. cit.* 2nd series, vi, 135-6, 374-90.

² Arch. Préf. Pol., series Aa 167 (Mail), fo. 73.

³ See Bailly-Lafayette correspondence, Bib. Nat. fonds français 11697, pp. 235, 239, 246-8.

⁴ Cf. Y. Forado-Cunéo, 'Les ateliers de charité de Paris pendant la Révolution française', *La Révolution Française*, LXXXVI (1933), 317-42; LXXXVII (1934), 29-61, 103-23.

⁵ See Jaffé, *op. cit.* pt. II.

reached its climax in the Champ de Mars demonstration of 17 July.¹ It is worth noting that the wages movement, one of the two great movements of its kind in Paris during the Revolution, took place at a time when prices were either stable or tending to fall and when there was a shortage of labour in several trades. It is also significant that the political movement culminating in the Champ de Mars petition was the only one of the social movements of the period 1789-91 that did not raise the question of bread or of any other article of popular consumption as an issue.

3. October 1791-June 1793

With the autumn of 1791 we enter a period of rising prices and depreciating paper money, gradual at first but, as the outbreak of war drew nearer, becoming more precipitous. This inflationary movement is reflected in the heavy depreciation of the *assignat*; from a level of 82 per cent of its nominal value (according to the Treasury figures) in November 1791 it declined to 36 per cent in June 1793.² Unlike the two preceding periods, it is one, also, of rising nominal wages and, in some trades, at least, of shorter working hours.

From this time until the end of 1794, bread begins to lose its particular significance as an issue of popular concern. After a variety of expedients to keep its price within limits, the Commune eventually fixed it on 4 March 1793 at 12 sous for the 4 lb. loaf;³ and, despite steady increases in the price of other consumer goods and in wages, this price was maintained by subsidies to bakers. Consequently, Parisians were to suffer less from the full rigours of inflation, both in 1793 and in 1795, than the population of small country towns, where the price of bread continued to rise with the rising cost of flour.⁴ Yet there were periods, even before the end of 1794, when bread was in short supply: such was the case, for example, during the months March-June 1793, when there was a more or less chronic shortage of bread in Paris, to which the reports of police agents constantly refer.⁵

Meanwhile, starting in the late autumn of 1791, the prices of other consumer goods, particularly of colonial products, were beginning to rise sharply. In February 1792, sugar was sold at 50 sous per lb., or at nearly double its price of 1789-90.⁶ Other commodities followed suit;⁷ and, after a temporary pause in the summer and autumn of 1792,⁸ the prices of

¹ See A. Mathiez, *Le Club des Cordeliers pendant la Crise de Varennes et le Massacre du Champ de Mars* (Paris, 1910).

² From January to June 1793 alone it fell from 72 to 36 %. See Harris, *op. cit.* pp. 166-76; also R. G. Hawtrey, 'The Collapse of the French Assignats', *The Economic Journal*, no. 111, vol. xxviii (September 1918), pp. 300-14.

³ Cf. P. Caron, *Paris pendant la Terreur*, I, 9, n. 1.

⁴ Thus, in the Department of the Allier, the price of the 4 lb. loaf rose from 9 sous in 1789 to 20 sous in June 1793 (Harris, p. 104). In February 1795, when the larger proportion of bread sold in Paris was still subsidized, it was reported that the 4 lb. loaf was selling in the Yonne Department at 60 sous. (Arch. Nat. F⁷ 4665, doss. 5.)

⁵ Arch. Nat. F⁷ 3688 (2); AF^{IV} 1470.

⁶ See Mathiez, *La Vie Chère et le Mouvement Social sous la Terreur* (Paris, 1927), pp. 36-41.

⁷ E.g. the price of eggs rose from 42 to 54 livres per 1,000 during 1792 (d'Avenel, *op. cit.* iv, 598).

⁸ Cf. Harris, p. 102.

nearly all essentials other than bread took another sharp upward turn in the early months of 1793.¹ It was against a background of rising prices and bread shortage that the National Convention in the early summer of 1793 succumbed to the pressure of the Paris Sections and took the first step to institute a system of price-controls by enacting the first Maximum law on 4 May.² Before elaborating a more comprehensive system, the Committee of Public Safety conducted a nation-wide inquiry as to comparative prices and rates of wages in June 1790 and June 1793. The following table, based largely on the Paris returns to this inquiry, illustrates the movement of wages in a number of trades and of prices of a number of consumer goods.³

Table 3. *Prices and wages in June 1793, contrasted with June 1790*

Wages					Prices						
Occupation	June 1790		June 1793		% increase of (2) over (1)	Commodity	June 1790		June 1793		% increase of (2) over (1)
	(1)		(2)				(1)		(2)		
	l.	s.	l.	s.			l.	s.	l.	s.	
Shoemaker	2	5	3	10	+ 56	Bread† (4 lb.)	0	11	0	12	+ 9
Tailor	2	0	3	10	+ 75	Wine (litres)	0	10	0	16	+ 60
Hatter	2	5	5	0	+ 122	Beef (per lb.)	0	11	0	26	} + 77 (approx.)
Locksmith*	2	10	5	10	+ 120	Veal (per lb.)	0	11½	0	14½	
Joiner	2	5	4	10	+ 100	Mutton (per lb.)	0	14	0	18	
Carpenter	2	10	4	0	+ 60	Butter (per lb.)‡	0	14	1	6½	90
Mason	2	0	3	0	+ 50	Eggs (per 100)§	4	4	5	10	+ 31
Harness-maker	2	10	7	0	+ 180	Rice (cwt.)	47	10	105	0	+ 121
Wheelwright	2-4 l.		6-8 l.		+ 100-200	Olive oil (cwt.)	100	0	180	0	+ 80
						Sugar (lb.)	1	4	5	0	+ 300
						Coffee (lb.)	1	14	4	0	+ 135
						Tallow candles (lb.)	0	15	2	0	+ 167
						Firewood (per 56 cu.ft.)	21	12	30	0	+ 39

* N.B. Whereas in June 1790 a locksmith worked from 5.30 a.m. to 8 p.m., in June 1793 he worked only from 6.30 a.m. to 7 p.m.—a reduction of 2 hours in his working day.

† See pp. 251 and 253, above. The price of bread is not given in the *Enquête*.

‡ Biollay, p. 167.

§ *Ibid.* p. 176.

¹ On 25 February, sugar was being sold in Paris at prices varying from 47 to 60 sous (1790 price: 26 sous); candles at 18½ to 20 sous (15 sous); coffee at 40 sous (34 sous). 1793 prices are from Arch. Préf. Pol., series Aa (various cartons); 1790 prices (in brackets) are from Biollay, pp. 288-90, 296, 298.

² This was limited to controlling the price of bread and of flour; it had, therefore, no special significance for Paris, where the price of bread was already controlled. For its terms and debate, see *Archives Parlementaires* (1st series, 1789-99. 80 vols. Paris, 1879-1914), LXIV, 56-7.

³ Except where otherwise stated, these figures are from the *Enquête de juin 1793* (Arch. Nat. F¹² 1547^e, doss. 2).

On the basis of the evidence here presented it is possible to give a rough indication of the changes in the standard of living between 1790 and 1793. In the following table this is attempted in the form of the hypothetical budgets of a journeyman carpenter and a journeyman locksmith for June 1790 and June 1793:

Table 4. *Hypothetical budgets of Parisian workers in June 1790 and June 1793*

Budget of a journeyman carpenter				Budget of a journeyman locksmith			
In June 1790 (wage: 50 s.; 'effective' income: 30 s.)		In June 1793 (wage: 80 s.; 'effective'* income: 57 s.)		In June 1790 (wage: 50 s.; 'effective' income: 30 s.)		In June 1793 (wage: 110 s.; 'effective'* income: 78 s.)	
4 lb. bread	11 s.	4 lb. bread	12 s.	4 lb. bread	11 s.	4 lb. bread	12 s.
Rent	3 s.	Rent†	6 s.	Rent	3 s.	Rent†	6 s.
1 litre wine	10 s.	1½ litres wine	24 s.	1 litre wine	10 s.	1½ litres wine	24 s.
½ lb. meat	5 s.	½ lb. meat	9s.	½ lb. meat	5 s.	1 lb. meat	18 s.
Balance for vegetables oil, clothing, etc.	1 s.	Balance	6 s.	Balance	1 s.	Balance	18 s.
Total	30 s.		57 s.		30 s.		78 s.

* 'Effective' earnings are here based on the assumption of a 5-day working week. Many of the old Feast Days had, by this time, been abandoned, but the Revolutionary Calendar, which considerably increased the number of working days per year, had not yet been introduced.

† For lack of exact information on rent, I have assumed here an increase of 100 % on charges made in 1790, which is roughly in proportion to the rise of other prices. The pressure of population on living space in Paris was still considerable: it was not until the autumn of 1793 that lodging-house keepers were to complain of a dearth of clients (cf. J. de La Monneraye, *La Crise du Logement à Paris pendant la Révolution* (Paris, 1928), pp. 12-13).

It will be seen that the carpenter, whose wage has increased rather less than the average shown in Table 3, has yet been able to increase his consumption of wine and to have a more reasonable balance over for the purchase of essentials not specified in these budgets. In the case of the locksmith, whose wage has increased more than the average, the improvement is considerably greater: he has increased his purchase of wine, doubled that of meat and has nearly one-quarter of his income over for the purchase of oil, vegetables and clothing. We cannot, of course draw any conclusions for the wage-earners of Paris as a whole owing to the absence of any wages figures for unskilled workers; but we may perhaps tentatively conclude that, among workshop journeymen at least—and they accounted for the majority of the wage-earning population¹—the rise in the prices of essential commodities during the period 1790-3 was substantially offset

¹ Cf. Braesch, *op. cit.*

by the rise in nominal wages.¹ Yet we must beware of over-confident conclusions, as we have no means of knowing how far this improvement in the nominal purchasing power of wages was offset by the shortage of consumer goods, including bread.

The popular movement of the years 1792 and 1793 is of exceptional importance for the history of the Revolution. It was dominated, of course, by the great political movements of June–August 1792, which overthrew the monarchy, and of May–June 1793, which expelled the Girondin leaders from the Convention and prepared the way for the assumption of power by the Jacobins. In the first of these movements the issue of bread or of other consumer goods was almost entirely absent; but, in the second, discontent with the shortage of bread and the continuing scarcity and high prices of colonial products gave a powerful initial stimulus to popular participation and ensured the success of the Jacobins' political aims. Most significant, however, of the swift reaction of Parisians during the Revolution to any sharp upward movement in the prices of consumer goods were the food riots of February 1792 and 1793, provoked by the sudden increase in the price of sugar and of other colonial products. In the riots of 1793 provisions shops all over Paris were invaded by angry crowds, who forced grocers to sell their wares at 1790 prices.² In March and April of that year, simultaneously with the broader movement directed against high prices and shortages, there developed an agitation for higher wages by paviours, masons, carpenters and bakers;³ but this movement was short-lived and cannot be compared, in scope or importance, with that of April–June 1791.

4. June 1793–July 1794

This is the period of Maximum Général (general price-control) and of the Revolutionary Government, led by Robespierre; but the Jacobin dictatorship was not firmly entrenched until the autumn of 1794. Meanwhile, the *assignat*, according to the Treasury figures, slumped further from 36 to 22 per cent of its nominal value,⁴ the bread shortage persisted and prices continued to rise. Police agents' reports testify to the continued shortage of bread, to the rise in the price of every essential and to the existence of angry queues outside bakers' shops.⁵ In September, Béraud and Rollin, agents of the Ministry of the Interior, reported prices from the markets, which are contrasted with those for June⁶ in Table 5.

It is not surprising that such a sharp upward movement in prices, threatening to destroy the improvements gained since 1790, should have evoked an angry response from the Parisian *menu peuple*, who gave

¹ Besides, in some trades at least, there appears by this time to have been a substantial reduction in working hours (see the case of the locksmith in footnote to Table 4, above). Long working hours persisted long after 1789. A journeyman tailor, arrested after the Champ de Mars affair in July 1791, claimed that he worked from 5 a.m. until 9 p.m. (Arch. Préf. Pol. Aa 215 (Henri IV), fo. 455).

² For details, see my article, 'Les émeutes des 25, 26 février 1793 à Paris', *Ann. Hist. de la Rév. Franç.* no. 130 (Jan.–March 1953), pp. 33–57.

³ Arch. Nat. AF^{IV} 1470.

⁵ Arch. Nat. F⁷ 3688 (3).

⁴ Cf. Hawtrey, *loc. cit.*; Harris, *op.cit.* p. 176.

⁶ Caron, *op. cit.* 1, 57–60.

Table 5. *Prices of consumer goods, June and September 1793*

(Prices are for lb. weight, unless otherwise stated)

Commodity	June 1793 (1)	Sept. 1793 (2)	% increase of (2) over (1)
Wine (litre)	16 s.	20 s.	+ 25
Meat	19 s.	18-22 s.	+ 16
Veal	14½ s.	24-26 s.	+ 85
Eggs (25)	27½ s.	50 s.	+ 84
Butter	26½ s.	35-36 s.	+ 33
Oil (grade 1)	52 s.	60-70 s.	+ 25
Sugar	100 s.	110 s.	+ 10
Coffee	80 s.	90-100 s.	+ 19
Soap	23-28 s.*	70 s.	+ 175
Tallow candles	40 s.	44 s.	+ 10

* This is the price quoted in February 1793, taken from reports of the grocery riots of 25-26 February (see p. 256 n. 2, above).

enthusiastic support to the demands put to the Convention by the Paris Commune on 4 and 5 September for the institution of a rigorous system of price-controls and for severe penalties against speculators and forestallers.¹ This was the immediate background to the enactment of the Law of the Maximum Général on 29 September 1793.² The adoption of this law, the creation of the so-called Armée Révolutionnaire to ensure adequate supplies of bread and meat, and the strengthening of the organs of government—all of which are features of the autumn of 1793—ushered in a new revolutionary era, fraught with significant experiment and one which has divided historians of the period ever since.³

The law of 29 September, supplemented by an amending law of 1 November, provided for the increase of prices at the point of production by one-third over June 1790, plus a rate per league for transportation, plus 5 per cent for the wholesaler and 10 per cent for the retailer. The law affected 39 commodities, mostly necessities, but excluded firewood, fish, tobacco, salt, soap, milk, crude sugar and poultry. In the case of wages, it provided for a 50 per cent increase over rates prevailing in June 1790.⁴ Whatever the merits or otherwise of these laws as a piece of social legislation, there can be no doubt that they arrested the chaotic inflationary trend of January–September 1793. The stabilization is reflected in the upward movement of the *assignat*, whose nominal value rose (according to the Treasury figures) from 22 per cent in August to 33 per

¹ Cf. *L'Ancien Moniteur (Réimpression)*, xvii, 73-4; also E. Soreau, 'Les ouvriers aux journées des 4 et 5 septembre 1793', *Ann. Hist. de la Rév. Franç.* xiv (1937), 436-47. For disturbances at bakers' shops in August–September, see police agents' reports (Arch. Nat. F⁷ 3688 (3)); and, for records of arrests in this connexion, see Arch. Préf. Pol. Ab. 327 (registre de la Force).

² For text and debate, see *L'Ancien Moniteur (Réimpression)*, xvii, 775-6.

³ For the different opinions of historians, see Harris, pp. 147-8.

⁴ For the foregoing, see H. E. Bourne, 'Maximum prices in France, 1793-1794', *American Historical Review*, xxiii (October 1917), 107-13; and (by the same author) 'Food control and price-fixing in Revolutionary France', *The Journal of Political Economy*, xxvii (1919), 73-94, 188-209.

cent in November and to 48 per cent in December 1793.¹ And, as far as the thirty-nine selected commodities were concerned, the law was enforced: this much at least, is conceded by the main body of historians.² Yet the very stringency of its enforcement compelled many producers and dealers either to withhold supplies or to sell both 'taxed' and untaxed goods at prices above the Maximum. Thus, pork butchers, to evade the law, sold only cooked pork (the price of raw meat alone was controlled); an army of *mercandiers* and *revendeurs* invaded the markets and back streets, selling sugar, butter and poor quality meat above the controlled price;³ and, in December, agents of the Ministry of Interior reported that butter was being sold in Paris markets at 36-44 sous per lb. (controlled price: 22 sous) and eggs at 80 sous for 25 (compared with 21 sous in June 1790, 27½ sous in June 1793 and 50 sous in September).⁴ Further, a shortage of bread recurred in December, though it seems to have been overcome, temporarily at least, by a system of rationing.⁵ In April, meat was also rationed on the basis of a distribution every 5 days of ½ lb. per head.⁶ Shortages became more acute in the spring, and police reports for this period reveal a growing irritation on the part of wage-earners, housewives and others over the difficulty in obtaining meat, butter, eggs, candles and other commodities.⁷ How far these shortages and sales of essentials at 'black market' prices offset the value to the working population of the controlled prices provided by the Maximum laws, it is, of course, impossible to estimate; their total effect, however, must have been considerable.

Marion has suggested that the Committee of Public Safety made a farce of the whole legislation of the Maximum by deliberately ignoring the provisions relating to wages.⁸ While this is an exaggeration, it cannot be denied that, had the authorities clung as closely to the letter of the law in regard to wages as they did in the case of prices, they would have found it difficult to man their arms industries and to keep essential services in operation at a time of labour shortage, created by the needs of war. Even on Government contracts rates prescribed tended to be well above the Maximum. Thus, in March 1794, the following rates of wages were

¹ See Hawtrey, *loc. cit.*; also Harris, pp. 176-85. It is true that the *assignat* was to fall again to 34% by July 1794, but if we compare the all-over trend of the *assignat* between October 1793 and July 1794 (period of Jacobin dictatorship) with that of January-September 1793 and, more particularly, with that of July 1794-December 1795 (see Hawtrey), the degree of stabilization achieved will appear remarkable.

² Cf. Harris, pp. 147-8, 181.

³ H. E. Bourne, *op. cit.* pp. 206-7 (based on the reports of police agents Grivel and Siret).

⁴ Caron, *op. cit.* I, 325, 344; II, 20.

⁵ *Ibid.* I, 305. The consumption of bread per head of population was increasing. With a population certainly no greater than that of 1789-91 (cf. La Monneraye, *loc. cit.*), Paris was consuming 1,800-1,850 sacks of flour per day in February 1794, compared with 1,500 sacks in 1789 (Harris, p. 154) and 1,400 in 1793 (*L'Ancien Moniteur (Réimpr.)*, xvii, 190.)

⁶ Bib. Nat. nouv. acquis. franç. 2669, fos. 75-8.

⁷ See reports by the *commissaires de police* of the Paris Sections for March-April 1794 (Arch. Préf. Pol., series Aa, no. 70 (Arcis), fos. 418, 439-41; 94 (Butte-des-Moulins), fo. 63; 139 (Fidélité), fo. 140; 198 (Observatoire), fo. 260; 201 (Panthéon), fo. 61; 216 (Pont Neuf), fo. 389; 240 (Temple), fos. 156-7).

⁸ R. Marion, 'Les lois de Maximum et la taxation des salaires sous la Revolution', *Revue Internationale de Sociologie*, xxv (1917), 485-501.

laid down for building workers employed on the construction of the Panthéon (here contrasted with rates of pay in June 1790):¹

Occupation	Wages in June 1790 (1)	Wages in March 1794 (2)	% increase of (2) over (1)
Stonemason	45 s.	85-100 s.	+105
Mason's labourer	32-36 s.	70-85 s.	+128
General labourer	24-32 s.	60-70 s.	+132

Again, wages prescribed for workers in Government arms workshops at the end of May 1794 (here contrasted with daily wages of equivalent grades in June 1790) varied as follows:²

Grade of arms worker	Wages in June 1790 (1)	Wages in May 1794 (2)	% increase of (2) over (1)
Highly skilled	3½-4 l. 0 s.	16½ l. 0 s.	+340
Average worker	2 l. 0 s.	8 l. 5 s.	+312
Lowest paid worker	1 l. 16 s.	3 l. 0 s.	+66*

* This last figure is probably an under-estimate. In an address to arms workers, read to the Convention on 15 June 1794, the Deputy Frécine claimed that not one of them was receiving less than double his pay in 1790 (Marion, *op. cit.* p. 491).

Workers in private employment, too, received wages in excess of the Maximum. Thus, an arms worker, suing his private employer for non-payment of wages in March 1794, claimed that 'he had always received 6 livres, and more, per day';³ a journeyman carpenter was said to be receiving 6 livres a day in May;⁴ in January-February, bakers, previously receiving 8 livres per week (and board and lodging), were refusing to work for 15;⁵ while brush-makers were paid 90-120 livres per month in July, compared with an average wage of about 42 livres in June 1790.⁶

Though the evidence is patchy, it may perhaps be assumed then that, during this period, nominal wages doubled at the very least. Let us then

¹ The figures for March 1794 are from Arch. Nat. F¹³ 1138; those for 1790 are from Biollay, p. 19.

² Wages for May 1794 are from C. Richard, *Le Comité de Salut Public et les Fabrications de Guerre sous la Terreur* (Paris, 1922), p. 719. Wages for 1790 are those for foundry workers (skilled, semi-skilled and labourers), taken from Biollay, p. 42.

³ Arch. Préf. Pol. Aa 49 (Amis de la Patrie, fo. 410. The equivalent rate for his occupation (*forgeron armurier*), in 1790 was 1 livre 16 sous for an ordinary journeyman, or 3 livres 10 sous for a highly skilled worker (Biollay, p. 42).

⁴ Arch. Nat. F⁷ 4662, doss. 1. In March, masons and carpenters had threatened to stop work unless they were paid 6 livres per day for skilled work and 3 livres 5 sous for unskilled work (J. M. Thompson, *The French Revolution* (Oxford, 1947), p. 483).

⁵ Marion, *op. cit.* p. 487. In May, it was reported, from another Section, that bakers were refusing to work for less than 5 livres per day, plus food (Arch. Nat. BB³ 76). These examples certainly do not suggest that the shortage of bread was accompanied, as it was in 1789, by unemployment among bakers (see Hardy, *Journal*, viii, 434).

⁶ Arch. Préf. Pol. Aa 163 (Lombards), fo. 297. I have selected here what appear to be typical examples and avoided extreme cases, as, for example, the case of two arms workers, reported in May 1794 to be earning respectively 223 and 185 livres for a few days' work per *décade* (10-day period) (Richard, *op. cit.* p. 721); or the claim of the Popincourt Section that many workers earning 5 livres in March were earning 20 livres in June (Arch. Nat. F⁷ 4437); or, again, the oft-quoted complaint of police agents Grivel and Siret that daily labourers were demanding ten times their pay of a year before (Marion, *op. cit.* p. 487).

once more examine the hypothetical budget of a journeyman carpenter and contrast it with that of 1793. In the following table it is assumed that he is receiving a daily wage of 6 livres¹ and that his 'effective' daily earnings are 5 livres.²

Table 6. *Hypothetical budgets of a journeyman carpenter in 1793 and 1794*

In June 1793 (wage: 80 s.; 'effective' income 57 s.)		In June 1794 (wage: 120 s.; 'effective' income: 100 s.)	
4 lb. bread	12 s.	6 lb. bread	18 s.*
Rent	6 s.	Rent	6 s.
1½ litres wine	24 s.	2 litres wine	30 s.
½ lb. meat	9 s.	2/5 lb. meat	6 s.*
Balance for vegetables, oil, clothing, etc.	6 s.	Balance for vegetables, oil, clothing, etc.	40 s.
Total	57 s.	Total	100 s.

* The higher figure for bread that appears in this budget owes its presence to two considerations: (1) the higher total consumption of bread at this time than in 1789-93 (see p. 258 n. 5, above); (2) the enforced reduction in the amount of meat consumed owing to the introduction of a ration of ½ lb. per head every 5 days (see p. 258, above). As this worker's full quota of meat only amounts to ⅔ lb. per day (½ lb. × ⅔ × 4), it is assumed that he would compensate himself by a larger purchase of bread.

If the improvement in living standards that this budget suggests³ can be assumed to be of a more general application, why did the mass of the wage-earners and *sans-culottes* desert Robespierre and allow his enemies to overthrow him so easily on the night of 9-10 Thermidor? Mathiez has pointed to the dissatisfaction of the workers with the Committee and the Commune over wages;⁴ and it is true that, after the removal of the Hébertists in March, 1794, the Robespierist majority aroused the hostility of the wage-earners by their insistence on maintaining some semblance of the 'maximum des salaires' at a time that was particularly favourable to the pressing of claims for higher wages. Hence, the main social movements of the spring and summer of 1794 were wages movements rather than movements in shops and markets over food supplies; and, during this time, the Committee sternly rejected the claims of arms workers, potters, carpenters, tobacco workers, water-carriers, printers and riverside workers

¹ See p. 258 and 259, n. 4, above.

² I have here assumed a higher ratio than previously of 'effective' earnings to nominal daily wages owing to the adoption, in the autumn of 1793, of the Revolutionary Calendar, which reduced official holidays to one per 10-day period (*décade*). While this principle was rigorously enforced in the arms workshops from November 1793 onwards (cf. Richard, *op. cit.* p. 699), it cannot, however, be assumed to have operated in industry generally, particularly as it roused stern opposition among the workers. The ratio here adopted is, frankly, a compromise.

³ It will be seen that, having increased his consumption of bread and wine over that of 1793, the carpenter has a far more generous margin for the purchase of eggs (uncontrolled), oils, clothing, etc. On the other hand, he may be forced, by the shortage of certain essentials, to buy at inflated prices on the 'black market'. On balance, however, it would appear that his general position has substantially improved.

⁴ See Mathiez, *op. cit.* ch. 10 'Le Maximum des Salaires'.

and even sent the leaders of the potters and tobacco workers before the Revolutionary Tribunal.¹ In addition, the wage-earners could not be other than alarmed by the publication on 23 July of the Commune's 'maximum des salaires', which strictly accorded with the provisions of the law of 29 September in respect of wages;² so much so that it provoked demonstrations of protest at the City Hall on 9 Thermidor itself;³ and it was readily believed (and hoped) that the removal of Robespierre would allow wages to resume their upward course unchecked.⁴

5. July 1794–May 1795

Having disposed of Robespierre and his principal associates, the Thermidorians lost little time in dismantling their system of government, in purging the Revolutionary Committees of their Jacobin personnel and in drastically relaxing economic controls.⁵ In October 1794, the Maximum legislation was so amended as to allow prices to rise to a level two-thirds above that of June 1790; and, on 23 December, the Maximum laws were virtually abolished: the price of rationed bread was still maintained at 12 sous for the 4 lb. loaf (though bread was now allowed, in addition, to be sold freely on the 'open' market); the basic meat ration of $\frac{1}{2}$ lb. every 5 days was also retained, at its new price of 21 sous per lb.; otherwise, prices were now free to find their 'natural' level.⁶ The inflationary movement thus set in motion is reflected in the steady fall of the *assignat* from 36 per cent in July to 28 per cent in October, 24 per cent in November, 20 per cent in December, 17 per cent in February and to $7\frac{1}{2}$ per cent in May 1795.⁷

The consequences of the new policy were to prove disastrous for the common people of Paris.⁸ Already in November, a police agent reported:

Complaints and murmurs are continually heard. The long delays in obtaining rationed bread, the shortage of flour, the high prices, in markets and squares, of bread, firewood, wine, coal, vegetables and potatoes, the price of which is increasing daily in the most alarming manner, are plunging the people into a state of wretchedness and despair that is easy to imagine.⁹

We see, then, developing, side by side with the 'closed' market, still subject to restriction, an 'open' market not only in unrationed goods—eggs,

¹ See A. Soboul and G. Rudé, 'Le maximum des Salaires du 5 thermidor,' *Ann. Hist. Rév. Franç.* no. 134 (Jan.–Mar. 1954).

² *Ibid.*

³ Arch. Nat. AF 47, plaq. 366.

⁴ It was later reported by a brush-maker of the Section des Lombards that his workpeople had greeted the news of the fall of Robespierre and his principal associates with the observation, 'That puts paid to the Maximum', and promptly put in for a 33 % increase to their wages! (See R. Cobb, 'Une "coalition" des garçons brossiers de la Section des Lombards', *Ann. Hist. de la Rév. Franç.* no. 130 (Jan.–March 1953), pp. 67–70.)

⁵ For the best short account of this process, see G. Lefebvre, *Les Thermidoriens* (Paris, 1946).

⁶ Cf. Harris, pp. 145–6.

⁷ See Hawtrey, *loc. cit.*; Harris, p. 186.

⁸ Yet Harris is right to point out that continued Government subsidies in respect of bread and meat probably saved Parisians from the utter depths of calamity suffered by the mass of the population in regions where controls had been taken off altogether. (*Op. cit.* p. 99.)

⁹ Arch. Nat. F⁷ 3688 (4) (my own translation).

firewood, butter, oil and vegetables—but in meat and bread as well. With the repeal of the Maximum laws and the constantly increasing shortages of every article entering into the wage-earner's budget,¹ not only did the Parisian *menu peuple* have to purchase all commodities other than bread and meat at the higher, 'famine' prices now prevailing, but the inability of the Government to honour its undertaking to provide sufficient quantities of bread and meat at the controlled price² forced them to spend an ever higher proportion of their income on bread and meat in the 'open' market.³ Thus, for the first time since the autumn of 1791, the price of bread reappeared as a social problem. Its importance may be judged from the rise in the price of a pound of bread on the 'open' market from 25 sous on 28 March (already eight times its controlled price) to 65 sous on 11 April; to 6 livres on 21 April; to 9 livres on 11 May; while, a week later—two days before the outbreak of the first Prairial—it had risen to 16 livres.⁴ Meanwhile, as the daily reports of the police reveal, the price of unrationed meat, of wine, butter, eggs, potatoes (becoming increasingly an essential part of the Parisian's diet), vegetables and firewood rose sharply in January and February and, again, in March and April.⁵

In Table 7 the prices of a number of important consumer goods in April 1795 are contrasted with their prices in June 1790.⁶

Unfortunately, information regarding the movement of wages during

¹ For repeated popular complaints due to high prices and shortages, see Aulard, *La Réaction Thermidorienne*, I, 406–92, 500–17, 560–7, 652–63.

² On 16 March 1795, the Convention decreed that persons 'living by the toil of their hands' should receive a daily ration of 1½ lb. of bread and all others a ration of 1 lb. per head (*L'Ancien Moniteur (Réimpression)*, xxiii, 700). On 27 March, workers in the Temple Section were demanding that this pledge be honoured (Aulard, *op. cit.* I, 608). Indeed, it is apparent from the daily reports of the police that it was rarely, if ever, honoured. For the chronic shortage of meat during 1795, see Harris, p. 107.

³ During the year 1795 the proportion spent on bread in the 'open' market appears to have averaged around 40%: at this time, the Government was contributing daily 1,300 sacks of flour, earmarked for the rationed loaf, out of a total consumption in Paris of 2,150 sacks (Harris, pp. 107, 154). It would be surprising, however, if this proportion were not exceeded, owing possibly to faulty distribution or to 'leakage' into the 'open' market, particularly during the critical months March–May. (Cf. the almost continuous complaints, during this period, that this or that body of citizens had only received ¼, ½ or ¾ lb. bread per head, or even no bread at all—see Aulard, vol. I, *passim*, and numerous documents in Arch. Nat., series F⁷, and Arch. Préf. Pol., series Aa.)

In this connexion, it should be noted that a decree of the Committee of Public Safety of 31 March 1795 debarred lodging-house keepers, for a short while at least, from obtaining any rationed goods (i.e. bread and meat) for themselves or their lodgers—a measure which inevitably compelled a considerable proportion of the wage-earners (building workers were particularly numerous among the population of the *chambres garnies*) to obtain all supplies on the 'open' market. A police report of 2 April considers this decree to be largely responsible for the participation of wage-earners in the insurrection of 12 Germinal (1 April). (See A. Aulard, *op. cit.* I, 627.)

⁴ Cf. Aulard, I, 610, 654, 675, 715, 729. Thus, already by the end of April, the price of a single pound of bread on the 'open' market would account for three-quarters of the 'effective' daily earnings of a labourer at a time when he would be lucky if he could count on a daily ration of 2 lb. of bread for himself and family at the controlled price. (For the 'effective' earnings of a labourer, see p. 263 below; for almost daily complaints throughout April that the ration of bread had, in effect, been reduced to ½ or a ¼ lb. per head (or, even, to nothing at all), see Aulard, I, 627–94.)

⁵ *Ibid.* I, 360–520 (January–February), 520–694 (March–April).
⁶ Prices for June 1790—with the exception of the price of bread—are from the *Enquête de juin 1793*; those for April 1795—again with the exception of the price of bread (see p. 261 above)—are from Aulard, I, 627–94.

this period is extremely scanty. Though the Thermidorians were quick to exploit the difficulties that their predecessors encountered in trying to curb the upward movement in wages in the summer of 1794 and criticized the 'maximum des salaires' of the former Paris Commune as being 'insufficient' and 'arbitrary',¹ they made no appreciable amendments to the Paris scales,² gave a cold reception to further applications for higher pay³ and, by their deliberate fostering of inflation and of the freely competitive

Table 7. *Prices in April 1795 contrasted with June 1790*

(All prices are for lb. weight unless otherwise stated.)

Commodities	June 1790 (1)	April 1795 (2)	% increase of (2) over (1)
Bread (unrationed)	2½ s.	65-120 s.	+ 3,260
Wine (per litre)	10 s.	59 s.	+ 490
Meat (unrationed)	10 s.	150 s.	+ 1,400
Butter	14 s.	160-180 s.	+ 1,415
Eggs (per 25)	21 s.	140-160 s.	+ 615
Potatoes (per bushel)	14 s.	200-320 s.	+ 1,750
Firewood (per 56 cu. ft.)	21 l. 12 s.	170 l.	+ 685*

* Figures in this column are approximate.

'open' market, considerably undermined the gains that had been won by the wage-earners. Though nominal wages appear, by April-May, to have advanced substantially over July 1794, the purchasing power of the workers must have fallen back to, or considerably below, that of 1790. This would appear from the only two examples of wages for these months that I have seen—the first that of two labourers who, though paid 10-12 livres per day in April, claimed to be worse off than previously on a wage of 30 sous;⁴ the second that of a mathematical instrument maker who, in May, was receiving a daily wage of 15-20 livres.⁵ While this is clearly too slender a basis on which to construct an index of wages of more than very limited validity, we may perhaps obtain some general indication of the rise or fall in the purchasing power of wages since 1790 by relating the increased nominal earnings of these two sets of workers to the rise in prices of selected consumer goods over the same period. The results are summarized in Table 8.

While the over-all decline in real wages indicated by these figures may appear to be relatively slight, it must be remembered that the year 1790 was a year of low wages and low 'effective' earnings and that, had a comparison been made with June 1793 or June 1794, the drop in real

¹ Arch. Nat. AF II 80.

² Cf. Biollay, p. 3.

³ See, for example, the new Committee of Public Safety's threat to imprison port-workers asking for wages in excess of the revised 'maximum' of 15 August 1794 (Arch. Nat. AF II 80); and the cold reception given by the Convention to the petitions of the arms workers for higher wages on 31 October, 17 and 25 November 1794 (*Procès-Verbaux de la Convention Nationale*, XLVII, 132; XLEX, 244; I, 115).

⁴ Aulard, I, 658.

⁵ Arch. Nat. F⁷ 4669, doss. 5. The case is that of Dénot who, as an unemployed cook, had, on 14 July 1789, won notoriety by chopping off the head of de Launay, governor of the Bastille, with a butcher's knife (Arch. Nat. Y 12833).

earnings would have appeared much greater. The position in April–May, therefore, suggests a sharp reversion to the lean period of the early Revolution—a position, incidentally, that was to become worse in the course of the year.¹

Table 8. *Earnings index and prices index, April 1795*

Base period June 1790 = 100.

Occupation	Earnings*	Prices†
Labourer	905	900
Instrument maker	739	900

* This column represents 'effective' daily earnings in April 1795 as a percentage of 'effective' daily earnings in June 1790. I have here assumed a proportion of 'effective' earnings to wages of 3 to 4, which is lower than that previously assumed for 1794 (see Table 6, above). This is due to indications of unemployment given in the reports of police agents and suggested by the closing of the *ateliers d'armes* in February.

† The price index here used is taken from Harris (pp. 107–8). In drawing up this index, a weight of 3 was given to bread and a weight of 1 to each of the following: eggs, potatoes, soap, fuel, butter, meat (beef, veal and pork are combined as one). Further, in the case of rationed goods, it was assumed that one-third of the bread and one-half of the meat were purchased in the 'open' market.

It is evident that, if the proportion of bread purchased during April in the 'open' market proved, as I have suggested, to be considerably higher than the figure of one-third assumed by Harris, the index figure of 900 for this month would have to be appreciably raised. However, for lack of more precise evidence, I have preferred to accept Harris's estimate.

Space will only permit a brief glance at the social movements of this period; but they serve to underline these conclusions. The Parisian *sans-culottes* had been left confused and leaderless by the *coup d'état* of Thermidor, which they had done so little to avert. Even the movement of wages, apart from a number of petitions of the arms workers, petered out as the intentions of the new Committee became clear. But after the New Year a social movement developed in response to the Convention's inflationary policy and was to gain powerful momentum before it exploded in the desperate outbreaks of Germinal and Prairial. The rising cost of living, the closing of the *ateliers d'armes* in February, the persecution of Jacobins, the extravagance of the new rich, the arrogance of the middle-class youth (or *muscadins*) were all to play their part in stimulating this movement; but, above all, it was the high price and shortage of bread—at times reduced to a ration of 3 or 4 ounces—that gave it continuity and coherence. Both insurrections adopted as their slogan, 'Bread and the Constitution of 1793'; yet the driving motive was that of hunger.² But the spur of hunger

¹ In November 1795, bread was sold on the 'open' market at 24 livres per lb., in December at 45–50 livres, and in May 1796 at 80 livres per lb.; while the market price for meat rose from 75 livres per lb. in January 1796 to 97 livres in March (E. Levasseur, *Histoire des Classes Ouvrières en France de 1789 à 1870* (2nd edition, 2 vols.; Paris, 1903), I, 236–44).

² This is abundantly clear both from the opinions of police agents, published by Aulard, and from the statements of the numerous persons arrested between January and May. (See Arch. Préf. Pol. series Aa, nos. 50, 71, 78, 80, 136, 153, 216, 241, 251; Arch. Nat. W 546–8 (Commission Militaire of 1–4 Prairial); and, above all, the papers of the Comité de Sûreté Générale, the most important of which are in the Archives Nationales, series F⁷.)

was not sufficient to achieve results: for lack of leadership and political purpose the movement was crushed, and the *sans-culottes* were not to rise again as a social force for 35 years.¹

We may now attempt a brief summary. After the 'famine' year of 1789, when bread was almost continuously in short supply and (when obtainable) swallowed up a disproportionate amount of the incomes of the wage-earners and *menu peuple*, we saw a slight fall in prices and rise in real wages during the period 1790 to September 1791. Already in the autumn of that year the rise in the price of bread threatened to recreate the conditions of 1789; and we have seen that this was followed by a sharp rise in the prices of all commodities, particularly of colonial products, in the early months of 1792, consequent upon the hoarding, speculation and shortages arising from the approach of war. This movement was partly arrested in the summer and autumn of 1792, but reappeared more sharply in the early months of 1793. A review of wages and prices in June 1793 suggested, however, that, partly owing to the subsidized provision of cheap bread, wages caught up with commodity prices as a whole. Yet this equilibrium was again disturbed by the continued rise in prices and the chronic scarcity of bread during the summer and autumn. We then saw that the energetic measures of control and requisition carried out by the Committee of Public Safety arrested the inflationary movement, ensured a comparative adequacy of supplies, stabilized the prices of essentials at a level not far exceeding that of 1790, and, though keeping the wages movement in check, allowed real wages to rise substantially. After the fall of Robespierre, we saw that this policy was abandoned by his successors and that there was a steep upward movement in the prices of all commodities—including, in effect, of bread—and the consequent reversion of the Parisian *menu peuple* to the famine conditions of 1789.

A general conclusion that here emerges is that an essential condition for the relative prosperity of the Parisian wage-earners, artisans and small shopkeepers lay, during this whole period, in the provision of cheap and plentiful bread: where that condition was lacking—as it was in 1789, in early 1790, for a period in 1791–2, in the summer and autumn of 1793 and, most strikingly, in the spring and summer of 1795—the *menu peuple* suffered great hardship. From this arises the further conclusion that, during the revolutionary period as a whole, despite the social upheaval and war-time shortage and inflation, the material conditions of the common people of Paris tended to improve. Though there were periodic setbacks in 1791–3, there was a relatively continuous and substantial improvement above the famine conditions of 1789 until their reappearance in 1795.

Our study has indicated, too, how responsive the popular movement was, at every stage, to any shortage or upward fluctuation in the price of essential consumer goods, particularly of bread. Although the special

¹ For a more detailed treatment of this movement, see my article, 'The motives of popular insurrection in Paris during the French Revolution', *The Bulletin of the Institute of Historical Research*, xxvi (May 1953), 53–74.

concern of the common people for the supply of cheap and adequate food often merged with, and lent strength to, the political aims of the revolutionary leaders (as in July and October 1789 and in the spring and summer of 1793), and although some popular movements—such as the agitation leading up to the Champ de Mars demonstration in the summer of 1791 or the overthrow of the monarchy in June–August 1792—were essentially political in character, the most typical and continuous of the popular movements were closely concerned with the issues of prices and supplies. So it was in the summer and autumn months of 1789, in the grocery riots of February 1792 and 1793, in the so-called ‘Hébertist’ insurrection of September 1793 and, most emphatically of all, in the final, desperate risings of April and May 1795. It is not suggested, however, that these movements owed their impetus solely to short-term economic factors. The motives inspiring them are, of course, far more diverse and must ultimately be traced to the complex of economic, social and political relations which the Revolution in part created and in part inherited from the Old Régime. A detailed study of French popular movements in the century preceding the Revolution has yet to be made; but it would be surprising if it were to reveal a pattern closely identical with that of similar movements arising during the revolutionary years themselves. Though sharp upward fluctuations in food prices were not uncommon under the Old Régime and provoked repeated protest and public disturbance,¹ yet the riots thus occasioned could not but be of a different order from those of 1789–95, because the particular social and political relations—not to mention the peculiar insurrectionary temper—of the Revolution were lacking.²

At various stages of the Revolution there were, as we have seen, strikes and other movements for higher wages: in August–September 1789, in April–June 1791, in the early summer of 1793, in the spring and summer of 1794. Yet in relation to the popular movement as a whole, these were of secondary importance, and they were rarely provoked by sharp upward movements in the prices of food. It is, in fact, significant that the most substantial of them—the movements of April–June 1791 and of January–July 1794—took place at times of a shortage of labour and of falling or stable prices; and that the latter movement collapsed when the Thermidorians relaxed controls and reverted to a policy of high prices and inflation.

These conclusions by no means exhaust the deductions that may be drawn from an examination of the movements of prices and wages and their impact on social movements during the Revolution. Quite apart

¹ See D. Mornet, *Les Origines Intellectuelles de la Révolution Française* (Paris, 1933), pp. 444–5.

² The same strictures apply to the revolutionary period itself after the defeat of the insurrections of Germinal and Prairial. How else are we to explain the collapse of the popular movement after this date notwithstanding the continued, and even accelerated, rise in the prices of all essentials in the latter half of 1795 (see p. 264 n. 1, above)?

For a discussion of the relative importance of political and economic factors in stimulating popular participation in insurrectionary movements during the Revolution, see my aforementioned article in the *Bulletin of the Institute of Historical Research* (cf. p. 265 n. 1, above).

from its contribution to economic or social history, it may perhaps be claimed that the more detailed study of such factors, and its extension to revolutionary France as a whole, would help to elucidate a number of problems that beset the political historian of the Revolution and whose solution might be brought nearer by the lines of investigation here suggested. These wider possibilities can, of course, be no more than hinted at within the brief and limited compass of the present study.

London

BLACKWELL HALL FACTORS, 1795-1799

By CONRAD GILL

AMONG the records of the Court of Chancery there is a collection of books and papers relating to the trade of cloth factors in London during the years 1795-9.¹ The firm, Hanson and Mills, to which these documents belonged, dealt, like many other factors of the time, in the central cloth market in Blackwell Hall, adjoining the Guildhall. Most of the material left by them consists of copies of their letters to clothiers in Gloucester, Somerset and Wiltshire, for West of England broadcloth was their chief article of trade. This correspondence shows only a part of the firm's dealings, and unfortunately no ledgers and very few accounts have been preserved. But the material that remains is interesting and valuable. It throws light on the general methods of the factors' trade, and shows clearly their relations with the manufacturers, the subject of so much controversy in earlier times.

Our knowledge of the previous history of the cloth factors comes chiefly from the writings of discontented clothiers who chafed at their dependence on 'these useless drones in the human hive'. We cannot follow here the details of their complaints, but clearly the real ground of unrest was the feeling of subservience to the factors, who found a market for the cloth, supplied the raw wool, and furnished the credit without which the looms and wheels would soon have been idle. The grievance was not so much the cost of these services, which was probably reasonable, as the power of a factor to make or mar the fortunes of the clothiers who dealt with him.²

Agitation led in 1696 to the passing of a statute which sought without success to restore the freedom of the clothiers. There followed a long period of calm, until 1739, when some clothiers, disputing with their workers over the level of wages, laid the blame on the factors, who were accused of forcing down prices, and so making impossible the payment of good wages. But this was the last concerted attack. When, in 1757, there was fresh trouble in the industry (due in large measure to war and bad harvests) no one blamed the factors. At the time of Hanson's correspondence the importance of their share in the trade was unquestioned.

In 1795, when the extant correspondence began, the firm had been in existence for more than fifty years. Francis Hanson, the senior member,

¹ Public Record Office, C 113, 16-18. It was through the kindness of Lord Greene and Sir C. T. Flower, when they were respectively Master of the Rolls and Deputy Keeper of the Public Records, that the opportunity was given me to make use of this collection. I am also indebted to the Trustees of the Leverhulme Research Fellowships; for this study of the cloth factors' records is incidental to a wider inquiry begun with the help of a Fellowship.

² A summary of the complaints is given in R. B. Westerfield's *Middlemen in English Business* (Yale Univ. Press, 1915), pp. 296-304. Several of the pamphlets in which they are put forward or answered are quoted in J. Smith's *Memoirs of Wool* (London, 1747), vols. I and II.

was formerly in partnership with a man named Everett, probably connected with F. and N. Everett, a firm of West Country clothiers who had large dealings in London. Hanson lived in Tyndall Place, Islington, at that time on the edge of the country, but in a district of growing population. His offices were at numbers 8 and 9 Cateaton Street, close to Blackwell Hall. In 1795 he took a new partner, Benjamin Mills, described in many of the letters as 'a gentleman of fortune and respectability'. It was well that Mills had both these assets to support him, for some lean years were ahead.

Their main business, like that of all factors, was to adjust supply and demand. They did so partly by telling the clothiers as precisely as possible what they should make. On the other hand they also undertook to find, if they could, a demand for the existing supply, by offering to buyers the 'resting' cloths which the makers had sent to them. The buyers were merchants engaged in the export trade, or wholesale drapers in London or the provinces who organized the home market. In dealing with clothiers the firm always referred to the buyers of cloth by the cryptic term 'our friends', and never mentioned their names. From the correspondence we learn some of the names of buyers, but few of the letters were addressed to them, and the methods of selling the cloth have to be inferred largely from scattered references. Therefore we must be content with no more than a piecemeal account of the buyers and their trade, and must devote our attention mainly to the factors' dealings with the clothiers, a subject on which there is much more information.

A few words should be said first of the cloths which were the chief articles of trade. The best kind of broadcloth was known as superfine. Cloths of this quality were in great demand. Some of the leading makers were able to sell their superfines for at least 17s. a yard, and if the dye-stuffs were expensive the cost might be much higher. Other cloths, not quite so fine but still of good quality, were known (in descending order) as supers, ladies', and liveries. There was also a large trade in cassimeres—twilled fabrics, much used for suitings. Cassimeres might be dyed in plain colours, or printed with small patterns on a coloured ground, or again they might be made of mixed yarns. Their appearance was rather like that of very fine serges. Most of the cloths preserved in Hanson and Mills's pattern books are excellent in appearance and texture, evenly spun and woven, finished with a delightfully soft and smooth nap, and well dyed in pleasant colours. In the pattern books rather more than thirty colours were named, about a third of them in the group which ranged from fawn to deep brown. Defoe wrote that the dyeworks of Gloucestershire produced 'the beautifullest scarlets and other grain colours that are anywhere in England, and perhaps in any part of the world'.¹ The same praise might have been given at the latter end of the century.

About fifty firms supplied the cloth which passed through Hanson and Mills's warehouse. The names of rather more than half a dozen appear

¹ *Tour through England*, Letter vi.

very often in letters and pattern books. Much of their trade followed long-established custom. A clothier would make for stock some cloths of the kinds and colours which best suited his trade. When a few pieces were ready—or the half-pieces known as ends—they were sent by wagon to London to be stored in the factors' warehouse. A letter of advice, with patterns of the cloth, went by mail coach and arrived a short time before the cloth.¹ In his letter the maker stated the price, in shillings per yard, which he hoped to receive for his pieces.

The cloth was arranged in piles in the warehouse: at any given time three hundred or more pieces might be kept in stock. When a merchant asked for cloths similar to some of those in the store, the pieces which seemed to the factor to meet the demand were sent to his 'friend' on approval. Cloths still unsold were said to be 'resting': those sent on approval were described as 'out'. An inventory of cloths in the store, made in the summer of 1796, shows that about 40 per cent of the pieces were out at that time. If the merchant was satisfied he bought the cloth for cash or credit. This method of dealing was satisfactory to him when material of the right quality and the right colour was available. Speed was often essential to his trade, and the factors' store gave him immediate supplies. It also gave him certainty, for he knew exactly what he was buying. Such trade had some attraction for the clothiers as well, since it left them free to decide the kind and amount of cloth that they should make. There was also some risk, for an unexpected change in demand might cause good cloth to lose its market.

But when a piece rested for a long time the reason was nearly always a defect in the quality or the colour: the best cloth, as a rule, was sold quickly. One of the lists of resting cloths shows that in June, 1795, N. and J. Cross of Trowbridge, very able and successful manufacturers, had fifty-one pieces in the warehouse, and thirty-six 'out'. A fortnight later all their cassimeres had been sold, and Hanson sent his congratulations. Early in the next year he reported that their stock of resting cloths was 'in galloping consumption'. Another skilful maker, J. Clark, also of Trowbridge, learnt in the middle of 1795 that all his resting cloths were sold, and that a fresh stock to replace them would be welcome. Clothiers whose standard was lower were urged to follow the example of these firms, whose plan was 'to make their cloth of such quality as to insure the sale'.

The description of the factors' trade given so far has referred to the goods sent on the clothier's initiative to rest in the warehouse until they were bought by a merchant. The second method improved on this system of chance consignments, since it guided the clothiers in the choice of the pieces which they should send. By conversation in the office, in Blackwell Hall, and in the coffee houses, and by watching the trend of fashion, factors used to gather information about the probable course of demand, and made forecasts which they passed on to the clothiers. Makers of cassimeres, for instance, were told in 1795 that there was a demand for white pieces, not of the natural colour of wool, but carefully bleached and dressed. On

¹ The patterns were usually about half an inch wide, and rather less than two inches long.

this occasion the cloth must be 'very pure white', 'a beautiful silver hue', assuredly not like some pieces sent by a maker early in the next year, which were 'so full of whitening as to be quite nasty'. The firm which was advised to make the bleached cassimeres was told at the same time that cloths of various other colours could be sold—lemon buff, good and varied drabs, a small number of scarlets; and a few days later dark blue supers were mentioned. Black superfines should be made with special care because 'some gentlemen were very particular in the article of mourning'. At a time of active trade details were given of several colours of broadcloths, 'of which', Hanson said, 'we can sell any quantity at present'.

This was a good method of trading. If the factors anticipated the demand accurately, cloths would be ready when they were wanted, and as they would come fresh from the packing room there could be no risk of damage through resting. Nevertheless there was one chance of failure. Factors could not always sell 'any quantity', and as several firms of factors, and many clothiers, competed to supply the goods, they might among them overstock the market. In this way a glut of broadcloths and carpetings was brought about in 1795, when people were 'hawking about supers and superfines at reduced prices', and the town began 'to swarm with kalmucks'.

The most exact method, constantly used by Hanson and Mills, was to send orders, often accompanied by patterns to be matched, for definite quantities of cloth. This kind of trade, when it worked smoothly, gave the clothier a guaranteed sale, and provided the merchant with the precise goods that he needed. But for two reasons it often failed. In the first place, the pattern might not be accurately copied. Although the fabric and the finish might be right, even a careful and experienced craftsman might not always produce exactly the shade of colour required. If the cloth were a mixture, the arrangement of the different yarns, and the colour of each separate yarn, had to be in accordance with the pattern. Faults in copying patterns were common, though it is true that the best clothiers usually overcame the difficulties, and Hanson was able to say of one of them, 'Mr Blagden's colours scarcely ever miss'.

The second disadvantage of trading by means of orders was that the cloth had often to be supplied in great haste. The date, which was generally given in a shipping order, might be uncomfortably near. It was sometimes learnt that a ship would be available unexpectedly; or a captain would announce that he intended to leave earlier than the merchant had anticipated, and there would be a rush to send consignments on board. In the autumn there was commonly pressure to prepare bales of cloth for the last voyage of the season. Such trade caused anxiety to factors and clothiers alike. Hanson often sent warnings that the time for fulfilling an order was almost past. He urged the makers to send goods by the first wagon bound for London, or if there were only a few pieces, by the first coach. Sometimes he had to report that a consignment had actually arrived too late. The fundamental difficulty was that if the manufacture of fine cloth were rushed, its quality would almost certainly be impaired.

Care was needed at every stage, and this implied steady, unhurried work. The factors understood the dilemma very well, but they had to do their utmost to provide the required number of pieces at the stated time.

Quality must sometimes have been sacrificed to speed, but in general one of the most important of a factor's functions was to maintain the standard of manufacture. In earlier times official aulnagers had examined and measured cloth, and if they were satisfied had sealed it. The system had never been very effective, and in the end it became a matter of routine.¹ The factors did more than aulnagers had ever done, for they strove constantly to ensure that the pieces which passed through their warehouses should be not only of the right dimensions, but also as free as possible from faults of any kind; and this part of their work was by no means a formality, for success in trade depended on the maintenance of standards. This was particularly true of factors such as Hanson and Mills, who dealt in the finest broadcloths. The ultimate buyers of their goods paid a high price and expected to have flawless cloth in return. Retail tailors or drapers, and wholesale merchants, were bound, therefore, to be very careful in making their purchases, and it was the factors' responsibility to furnish cloth which would satisfy the exacting demand.

There were three ways of keeping up standards. Occasionally the clothiers would be praised for their fine work; but commendation was rare, for it was expected that all cloths sent for sale in this high-class trade would be of very good quality.

A second method, more often used, was to encourage the clothiers by promising them that if they did their utmost to make good cloth they would be rewarded by a ready demand. Hanson's 'good friends' F. and N. Everett and Co. were assured that 'neatness and a very fine quality... with a rich lustre' would almost certainly bring quick sales. Of other cloths he said: 'Keep up the quality as that alone will sell them while the market is full of goods'; and he pointed out that the way to meet the competition of machine-made fabrics was to offer goods of the highest quality and the finest workmanship.

More common than exhortations to do good work were the complaints of shortcomings. Clothiers whose work was usually sound were told of their faults, but not seriously taken to task. The best makers, when their work was defective, were warned with reluctance, almost apologetically. But some criticisms were sharp and outspoken, for Hanson was not afraid of offending the less skilful makers. Two clothiers, whose names appear from time to time in the later correspondence, had some disagreeable dealings with the factors. Hanson told one of them that in spite of great efforts to dispose of his 'inferior and coarse goods' only one piece had been sold in four months: the rest of his cloth had been returned as often as it was sent out. The other maker was advised to sell his cloth 'in the country': it was 'infamous', and so much below the general standard that there was no demand for it in London. The last letter to this clothier told him that

¹ Aulnage was brought to an end, though not immediately, by the statute 11 Wm. III, c. 20.

he could never before have 'been connected with a respectable factor's house'.

All these criticisms imply that the cloth had been inspected at some stage, but it is not quite clear which pieces were examined by the factors. Possibly they did not take responsibility for resting cloths; the merchant himself could decide whether to keep or reject them. But when orders were sent to the clothiers, the factors may have inspected and measured the pieces because it was their duty to see that the merchants' orders were properly carried out.

It happens that lists have been preserved of all the cloths received, and of those inspected, between January and July 1796. If these lists represent the normal conditions of trade, we may conclude that the factors inspected rather more than half the cloths passing through their warehouse. The reports on flaws were usually very brief. Some cloths had stains, uneven colour, old colour, bracks, broken ground, or burlholes; some were described as mildewy, very thin, blotchy, very coarse, full of dust and foul, or comprehensively as very bad; but about three-quarters of the pieces had no defect of any kind. In the same year a separate report on a consignment of about sixty pieces ended with this favourable comment: 'The Above Cloth are good Wool and Good Spinning But very Long Wool shall be Glad to no wether I am to put them in Press.'

The man who inspected these pieces may have been in business on his own account, and some services, especially dressing by clothworkers and packing, were regularly done by independent firms. Clothworkers had often to give a fresh finish to cloths which had become 'stale', or had been rubbed and perhaps crumpled on the journey by wagon or coach. Their service might be very useful in making the goods more marketable. Hanson told one firm of clothiers who had complained of the cost of re-finishing, 'Tis to the clothworkers next to our exertions that we are indebted for getting rid of those old stale cloths'.

The other service—that of the packers—was still more frequent and important. The packer, John Yarnton, who regularly worked for Hanson and Mills, had a business of his own, and sent accounts periodically to the factors. Detailed instructions were given by the factors for the packing of every parcel or bale, and a register was kept of all the cloths sent out to be packed. The simplest packing, used when only a few cloths were to be sent together, consisted of a wrapping of stout paper, sometimes with a frame of boards. The charge for this service was 5*d.* or 6*d.* for each piece. A more thorough method was to cover the cloth with a tillot of canvas, then to frame it with boards and fasten it with ropes. The most careful packing, for export or for long journeys by land, involved the use of fillets of cloth, one fillet, as a rule for three or four pieces; and it cost from 1*s.* 9*d.* to 2*s.* 6*d.* for every piece. Several reports of damage to cloth on the way to London from the West showed the need for thorough protection. On two occasions the trouble was due to carriers' wagons overturning. When a large consignment was to be sent, it was packed in bales, each containing twenty or thirty cloths, tilloted, framed and roped.

A factor was primarily a commission agent, and a considerable part of the income of Hanson and Mills must have been made by their charge of a percentage on sales. But of this important side of their business we learn very little from the existing records. In one letter it was said that a piece of cloth worth 12s. a yard in ready money would cost 14s. if 'full credit', presumably for at least a year, were allowed. The additional charge of 2s. was made up of 1s. for commission and 1s. for 'time'—the period allowed for credit. Another letter stated that 1s. was 'for cash', and the other for 'selling risk, etc.'. These payments, Hanson said, were 'the constant rule of the trade', but had 'been found by experience not enough'. From clothiers no commission was demanded: they paid only the cloth-workers' charges and 'cloth money', which may have been an allowance for warehousing and other overhead expenses. It was quite small: on one occasion, and probably as a regular practice, it amounted only to 2s. for a whole piece.

Although the factors gained no commission from clothiers, they made profits in other ways, especially by the provision of credit. From the time when cloth factors first became a distinct group of traders they had undertaken some of the business of banking and finance. Credit was needed at every stage of manufacture and sale. Retail consumers, tailors and wholesale drapers, all expected to be allowed a long period for payment.¹ Exporting merchants, British and foreign, often demanded a year or more. Clothiers, who had to buy raw material and to pay wages, could seldom allow much credit, but usually needed it themselves. This was the opportunity of the factors. With support from bankers and financiers in London they were able to provide and organize credit, and to act as middlemen in money as well as cloth.

The central feature of their financial business was that clothiers who needed money were allowed to draw bills on them, based on the value of goods which the clothier had supplied. The factor's office was thus an accepting house for the manufacturers. For them the system had great advantages. As bills were still a regular form of currency in domestic as well as overseas trade, drafts accepted by a firm such as Hanson and Mills, with a good reputation both in the City and in the industrial districts, could be used in making payments or discounted for ready money.

The custom of the trade was that bills could be drawn as soon as the cloth was sold, but not earlier.² When a clothier sent pieces to London on his own initiative he was not entitled to draw a bill on the factor as long as the cloth was resting. Some clothiers misunderstood or ignored this restriction, and tried to draw when their goods were dispatched. Warnings had to be sent to several clothiers that they were drawing too soon or too

¹ Cf. Defoe, *Complete English Tradesman*, (1727), p. 337: 'How many thousands of families wear out their cloaths before they pay for them, and eat their dinner upon tick with the butcher?'

² There was a similar restriction in the Act of 1796. The notes to which clothiers were entitled under the terms of the Act were only granted when Cloth was sold: they were described as certificates of sale.

fast, and that if they continued to do so their drafts could not be accepted.¹

There was in practice a means by which clothiers could have credit before their cloth was sold. Factors allowed them to draw, each firm up to a prescribed limit, on the security of resting cloths, but treated their bills as loans. Two conditions were attached to these loans: they must not, without special leave, run beyond the value of the resting cloths; and the cloths themselves must be good, marketable commodities. Hanson repeatedly wrote that he could not advance money on stale, unsaleable stock. When goods were definitely ordered the position was different, for they were virtually sold when they reached the factor's warehouse, and the maker could at once draw a bill for the price. The loans were both convenient to the clothiers and profitable to the factors. Interest on loans was an important source of revenue; indeed it was said in 1739 that these financial dealings were the most valuable part of the factors' business.² An account of bills outstanding for the years 1796 and 1797 has been preserved among the papers of Hanson and Mills.³ It shows, as we should expect, that this undertaking, like the rest of their trade, was seasonal. There was a period of slackness in the winter; then in the spring more activity, which reached its height in the summer, but continued to the early autumn.

Although merchants often demanded long credit they sometimes preferred to pay cash in order to have the benefit of lower prices. It was for this reason that the clothiers were asked to fix both cash and credit prices when they consigned goods to London, and that Hanson and Mills, in sending out their statements of accounts, made a distinction between the clothiers who sold mainly for cash and those who dealt largely for credit.

Another source of revenue was the trade in wool. This part of their business, of long standing as we have seen, was to some extent—perhaps to a large extent—based on commission, though Hanson and Mills certainly bought and sold wool on their own account. In the fine manufacture at that time the makers used scarcely any other raw material than Spanish merino wool. In the eighteenth century English sheep farmers had come to think more of meat and less of wool, and English wool, even that of the West Country, had become coarser and longer, better suited for making worsted than for the broadcloth industry. Spanish wool had remained fine and consequently kept its value.

The wool sold by Hanson and Mills came chiefly from two large firms, Charles Brook and Co., and Manuel della Torre and Co. The greater part of it was sent to those clothiers who had the most regular dealings with the factors. Although there was no rule in the matter, it was expected that the factors who provided wool would also receive the cloth that was

¹ This was no new trouble. Defoe mentioned it in 1727 (*op. cit.* p. 354). Clothiers made a practice, he said, of sending cloth to the factors directly it was ready, and following it with a draft before there had been time to find a market for the cloth. The factor would then either sell the goods at a loss to meet the bills, or would refuse the bills and so baulk 'both their business and their credit'.

² *The Case between the Clothiers and Weavers* (Smith, *Memoirs*, II, 311).

³ P.R.O., C 113, 18.

made from it. Hanson explained that as his firm made only 'small profits both on the materials and the manufactured article', their 'principal inducement' in sending wool to the clothiers was 'the hope of having some cloth from them'.

As the good cloth, which was so important for the success of Hanson's trade, could only be made from fine wool, he was very much interested in obtaining supplies of the highest grade, and having secured them he never failed to commend them to the clothiers. One consignment was 'very good, fine hair'd, soft, clean wool'. Another was described as having 'fine hair, good staple, and peculiar softness': 'I think', said Hanson, 'you do not often see its equal.' When he had acquired a stock of material suitable for cassimeres, he said, 'There is not a better wool in London'. His trade in general was in 'the best of prime wools'.

An enterprise which seemed gradually to absorb more of Hanson's attention was the trade in North Country cloth. The manufacture both of woollens and of worsteds was increasing rapidly in Yorkshire, and a factor in London who could attract to his warehouse any considerable share of it would have a good prospect of expanding sales. An excellent supply of water, efficient machinery, and increasing skill, had all contributed to the growth of trade. To the old-established manufacture of kerseys and similar cloths there had been added the making of a variety of worsteds and the better qualities of woollens, so that Yorkshire was able to compete successfully with East Anglia in the production of 'new draperies', with the South-West in serges, with the West in cassimeres and even in superfine broadcloths. A recent article in *The Economic History Review* gave reasons for believing that as early as 1750 competition from Yorkshire was affecting the trade of the eastern counties.¹ In the latter years of the century, the period of Hanson's letter books, similar competition was beginning to be felt in the West.²

Hanson knew well the competitive power of the North Country industry, and he responded to it in two different ways. He often urged clothiers in the West to keep their trade by skill and enterprise, and by charging reasonable prices. At the same time he arranged that his own firm should share in the competing trade. The method of dealing in northern cloth differed from that of his main business, for instead of receiving goods from many clothiers, often sent on their initiative, he secured orders in London and passed them on to about half a dozen firms of middlemen in the West Riding. These middlemen were all described as merchants, though some were certainly clothiers as well.³ To one of these firms Hanson gave in 1799 a concise account of his trade in general. 'Our commission concern',

¹ M. F. Lloyd Prichard, 'The Decline of Norwich', *Econ. Hist. Rev.* 2nd ser. III, (1951).

² *Report from the Committee on the Woollen Manufacture*, 1806, p. 25. A table in this *Report* shows that the number of cloths, broad and narrow, fulled in a year, increased from 181,900 in 1780 to 455,100 in 1800. Fulled cloths included those which would compete most directly with the western manufacture.

³ E.g. J. and E. Brooke, of Hunslet Lane, Leeds, who were described in the *Report* of 1806 as being among the first four firms to set up factories in the district. Cf. Professor H. Heaton's *Yorkshire Woollen and Worsted Industries* (Oxford, 1920), p. 388: 'Many merchants gained absolute control over production by becoming manufacturers themselves.'

he wrote, 'is principally confined to Spanish Wool and West Country Manufactures. We are nevertheless in the habit of executing orders in those Yorkshire Woollens which extend from the article of Fearnoughts, Blanketts, etc., to Superfine Broads. This part of our concern is, however, comparatively small.'

The cloths indicated in this letter were more varied than those coming from the West of England. Besides the kinds named they included carpetings, coatings, quills, kerseys, half-thicks, sagathies, linsey-wolseys and cassimeres; and in an order for stuffs to Wade Browne and Co., of Leeds, other materials were mentioned—durants, goars, wildbores, bombasetts and moreens—some manufactured 'at your place', others to be bought in Halifax. Blankets, in which Hanson and Mills did a large trade, were sometimes sold in the piece, sometimes cut to the required size and made up in pairs. Some special coatings, not in the usual line of the factors' trade, were ordered direct from the makers. In December, 1795, letters were sent to John Clapham and Z. Wilkinson asking for fine coatings, 'anything that is a good pennyworth from 6s. 6d. to 8s. 6d. per yard'. A similar order went to Clapham in 1797.¹ Another kind of cloth occasionally wanted was linsey-wolsey. This was the chief manufacture of Kendal, and the cloth was supplied by two firms in that town. A type of linsey-wolsey with coloured stripes was in great demand, then and later, for women's skirts; and it was striped cloth that Hanson and Mills needed.

There must have been some special difficulties in maintaining the northern trade. As the London factors ordered their cloth from agents in Yorkshire, they were an additional group of middlemen interposed between the makers and the wholesale buyers. Professor Heaton's study of the Yorkshire industry has made us familiar with the trade of northern factors, who supplied goods to merchants in London or on the Continent, and has shown that the larger firms of clothiers, dispensing even with the service of local factors, often sold cloth on their own account to English and foreign merchants.² Therefore Hanson's 'friends' who wished to buy northern cloth had a choice of methods: they could send orders direct to the makers; they could deal with factors in the northern counties; or they could apply to factors in London. They were led at times to adopt the third and least direct method partly because in making up mixed consignments of broadcloths, cassimeres, kerseys, worsteds, and so on, it was convenient to order a variety of goods through a single firm of factors. Another advantage, a matter of credit, may have been more important still. With the help of a London factor it would be possible to extend the period of credit, and so to command a readier sale and a wider market for the cloth.

By these means the factors could win favour from the buyers. They could gain support from their agents in Yorkshire as well by allowing these agents to draw bills on them, and by supplying wool; for although most

¹ Sir John Clapham told me that this manufacturer was probably his great-grandfather.

² H. Heaton, *Letter Books of Joseph Holroyd and Sam Hill* (Halifax, 1914); and *The Yorkshire Woollen and Worsted Industries*, pp. 249, 384-5, 387-8.

of the Spanish wool for which Hanson 'scrambled' with success had to go to the western district, he was able to spare some of it for Yorkshire. The offer of these real benefits did not, however, bring an easy or certain return. Orders would only come if the buyers found that their commissions were 'executed upon terms equal to the Leeds merchants'. At one time Hanson was 'much disheartened' to learn that a firm of buyers in London could have goods more cheaply by ordering them in Wakefield. Nevertheless the merchants did find it worth while to deal with Hanson and Mills, for the business in North Country cloths continued, and apparently grew, during the last few years of the century.

Most of this trade was described as 'commission concern', and a commission of $2\frac{1}{2}$ per cent was mentioned more than once. But there is evidence that Hanson and Mills bought some cloth from Yorkshire on their own account. In 1795 they held about £3,000 worth of this cloth. The reason may have been that as the northern clothiers sent no goods to rest in the factors' warehouse, the factors themselves provided a stock of pieces to be stored there. This stock would be available for merchants who wished to choose their goods on the spot, or to make up consignments to be shipped at short notice.

The goods mentioned so far have been almost entirely woollens or worsteds. It is rather surprising to find that the enterprise of Hanson and Mills was not confined to these fabrics, but that they dealt in cottons as well. We do not know when the firm first became connected with the cotton industry: the rapid growth of this industry after 1780 may suggest an approximate date. It was no doubt the expansion of the northern woollen manufacture in the same period that led to Hanson's dealings in Yorkshire, and an enterprising textile firm would readily take a similar interest in the chance of new trade offered in Lancashire. The letter books do not tell us much of this branch of business. From the accounts of cloth bought by Hanson we know that in 1795 he held a stock of cotton goods worth between £2,000 and £3000; and in his letters we read from time to time of such matters as the dyeing of velveteen, the desirability of selling Manchester goods at once, the sale of fustians and printed calicoes, and the expectation of substantial orders for cottons. Some cottons may have gone to merchants who were making up mixed consignments. Some were probably sent with bales of woollen cloth to America; for Hanson and Mills were anxious to secure a market for their goods in the United States. The attraction of this enterprise was like that of trading with Yorkshire and Lancashire: it offered a share in a rapidly growing line of commerce. Professor Heaton has shown how the Americans, anxious to promote their own manufactures, welcomed in this period both skilled textile workers and textile machinery.¹ But before 1800 this movement had not gone far, and there was actually a remarkable increase in the amount of cloth imported.² Although the American trade gave Hanson and Mills some serious trouble with bad debts, they continued to send cloth, mainly from

¹ *Proceedings of the American Philosophical Society*, vol. xcv, no. 5 (Oct. 1951).

² J. Bischoff, *Woollen and Worsted Manufactures* (London, 1842), 1, 328.

Yorkshire, to shipping agents in Liverpool, and some of it almost certainly went to America.

Both of the industrial districts with which Hanson mainly dealt were so far from London that the clothiers or agents could not often travel up to town to keep in touch with the factors. But they did occasionally come, and their visits were undoubtedly useful. In the letter books are several invitations to call at Hanson's office or to stay at his house. The visits were always followed by friendly greetings in the correspondence. Still more useful, in all probability, were the factor's own journeys to the industrial districts. He would be able to study the progress of manufacture, to note local differences in method, and by making acquaintance with the clothiers to judge more closely their ability and financial strength. In 1796 he made a comprehensive tour, going first to Yorkshire, then for about a fortnight to Manchester, and finally to the West Country, where he stayed with his friends the Clarks, of Trowbridge.¹

Between the visits business relations were supplemented by an interchange of presents, often mentioned in the letters. Fruit, porter, cheese, hares, were sent. Sometimes a variety of good things was offered: 'A barrel of oysters, a box of fruit, or a canister of tabacco, chuse.'

Although Hanson was a strict judge of workmanship, the friendliness of many of his letters, and his kindness to people in misfortune, give a pleasant impression of his personality. Another side of his character, his interest in politics, can receive only a brief mention here. He belonged to the left wing of the Whig party, was strongly opposed to Pitt's policy in general, earnestly wished for peace with France, and was indignant both at the shortage of ready money in 1796 and the suspension of cash payments at the Bank in the next year. When the preliminaries of peace were signed at Leoben in 1797 he had high hopes that the peace would become general. He must have welcomed the Treaty of Amiens in 1802, but it is doubtful whether he lived to see the return of peace twelve years later.

The whole period of Hanson's letters was a time of war, and they reflect clearly the influence of the war on trade. In 1795 there was still abundant activity. A falling off at the end of the year was thought to be only seasonal. But in 1796 there was no recovery: all enterprise was hampered by the lack of ready money. Discounting of bills became a rare privilege, and trade shrank in consequence. The financial difficulty became a regular refrain in Hanson's letters. Money was 'a dreadful scarce article in

¹ John Clark was one of the leading clothiers in the West of England. Some interesting particulars of his career are given in *The Trowbridge Woollen Industry*, by Dr R. B. Beckinsale (published in 1951 by the Wiltshire Archaeological Society, and reviewed by Mr E. M. Sigsworth in *Econ. Hist. Rev.*, 2nd ser. v (1952) p. 142). Clark inherited a good business, specializing in fine medley cloths, and managed it with success for many years. He became an unpaid Methodist minister, and at the same time was a poet and a keen musician. When he died, in 1808, the business had already been managed for a few years by his nephews, John and Thomas. They showed remarkable enterprise, introduced a large amount of machinery, set up many new buildings, and greatly increased the volume of trade. The firm, J. and T. Clark, Ltd., still flourishes.

Clark, with his wife and son, returned Hanson's visit, and shortly before they came Hanson wrote that the prospect of seeing them was 'among the family a constant theme'.

London'. 'Money matters gets worse and worse in town.' 'Money matters are at such a pitch as never were before.' So they remained for many months; but inconvertible paper money, which Hanson had dreaded, brought relief, for the value of the bills accepted by his firm increased rapidly, and in the letter books complaints of the want of ready money came to an end.¹

But recovery was hindered by another difficulty, severely felt from 1797 onwards, the shortage of raw material, especially the Spanish wool which was essential to the fine manufacture. Stocks of the best wool remained low for some years, and Hanson wrote many times of the strong demand and the small supply. 'At every fresh arrival', he said, 'it is a complete scramble who shall have it.' And again, 'Wool is really scrambled for'. The summer of 1799 was still 'a very critical time for this article'.

Lack of raw material proved to be a temporary trouble; but there was during the years of war a general slackness in Hanson's line of trade, which persisted longer and was only partially relieved by contracts for the Government. In May, 1797, Hanson wrote, 'I believe such a spring trade was never known in London'. A year later he reported such a state of affairs as we ourselves have experienced in time of war: 'Old coats are the fashion this Spring.' He could not help adding the political reflection: 'If old principles were more in fashion, trade would be better.' There was rather more activity in the summer of 1798, but in the winter depression set in again. During the year 1799 conditions did not improve. In the whole month of September only twelve letters were copied into Hanson's book. The clothiers who owed money to the factors were pressed to repay their loans; and the letters of this year have a rather querulous, sometimes quarrelsome, tone, a sign of Hanson's anxiety. In July, when income tax was levied for the first time, he was asked to make a return of his profits. His answer to the Commissioners was that he had no income chargeable to the tax. It was, he said a 'disagreeable duty' to make this 'painfull declaration'.

The last of his extant letters was written in this period of depression, in December 1799. His business continued for about eight years longer. In the London *Directories* he was still mentioned as a Blackwell Hall factor until 1807. After that year his name did not appear. If the letters had continued until 1807 they would probably have shown some improvement in trade, for supplies of fine wool increased. The firm was not dissolved on account of a general decline in the business of factors. As the organization of industry, particularly in the West, did not rapidly change, there was scope for many years after this time for their trade, using methods not very different from Hanson's. When Blackwell Hall was closed, in 1820, for an extension of the Guildhall, the factors were still at work in undiminished numbers.²

¹ The value of bills outstanding in 1796, even in the summer, was seldom much above £2,500. In the spring of 1797 the value rose to £6,000. After some fluctuations it was still over £5,000 in September.

² See the lists of cloth factors given in successive volumes of Kent's *Directory*.

But before many years had passed there came a radical change. From about 1830 onwards the cloth manufacture in the West, which had been the chief support of Hanson's trade, was clearly declining, and old-established firms were closing down.¹ The fortunate firms in the West were those which adopted new methods of manufacture: in London the fortunate factors were those who had followed Hanson's example in adding to their earlier trade a secure connexion with the rising industry of the North.

¹ *V.C.H. Gloucestershire*, II, 152. There were several causes, including the greater use of machinery in the North, the growing popularity of tweeds, the wider choice of colour and design in worsteds, the improvement of worsted coatings, and changes in the supply of wool.

NOTE ON THE DOCUMENTS

The letters were copied into three volumes, two of which (in P.R.O., C 113, 18) contain letters from 15 June 1795 to 29 December 1798. The third (C 113, 17) takes the correspondence as far as 14 December 1799. The books vary very much in length: there are over 500 pages in the first, fewer than fifty in the second, and slightly over 100 in the third. Besides these Letter Books there are several smaller books in brown paper covers: two Standard, or Pattern, Books; two Packing Books; a Waste Book; and a 'Look Over' Book. There are also a number of miscellaneous papers, including an Account of Bills of Exchange (1795-7); lists of resting cloths, and of cloths bought by the firm; catalogues of wool auctions; a report on cloth inspected; a few letters; and papers relating to debts due from America.

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SHORT ARTICLES

THE SHEEPFOLD IN WILTSHIRE AND THE FLOATING OF THE WATERMEADOWS

By ERIC KERRIDGE

SHEEP-AND-CORN FARMING, a mixed agriculture based on the sheepfold, was the most widespread and general system of husbandry in lowland England in the early modern period. There were some specialized areas of grazing and dairying and the sheepfold was organized in different ways in various farming regions, but Latimer's generalization is valid for the period as a whole: 'A plough-land must have sheep; yea, they must have sheep to dung their ground for bearing of corn; for if they have no sheep to help fat the ground, they shall have but bare corn and thin.'¹

The floating of the watermeadows, hitherto almost entirely ignored by historians, was one of the cardinal improvements in English husbandry in the sixteenth, seventeenth and eighteenth centuries. The spread and improvement of drainage-works and of ley-farming methods and the introduction of floated watermeadows laid the foundations in the sixteenth and seventeenth centuries for the husbandry of the eighteenth and nineteenth centuries. Although the floated meadow achieved greatest fame in the downlands, especially in Wiltshire, Berkshire, Dorset and Hampshire, its use spread in the eighteenth century to many parts of eastern and midland England. Meanwhile, the catchwork water-meadow had established itself in the westerly parts of the country as firmly as had the flowing watermeadow in the downlands.²

The combination of sheepfold and floated watermeadow, while not exclusive to the chalk country of Wiltshire, or even to the down countries, played a unique part in the farming history of the chalklands radiating from the Salisbury Plain, where it reached the earliest perfection.

'The first and principal purpose of keeping sheep is undoubtedly the *dung of the sheepfold*, and the second is the *wool*.' This remark by Thomas Davis³ is supported by other eighteenth- and nineteenth-century writers⁴ and agrees with those of the sixteenth and seventeenth centuries,⁵ the correctness of whose opinions is evidenced by record.⁶ The old Wiltshire sheep was bred for folding,

¹ *Sermons* (Everyman ed.), p. 215. There is no space here to exhibit the mass of evidence for sheep-and-corn husbandry.

² See p. 286 n. 2. Those who have visited Dishley have had the opportunity of seeing the remains of Bakewell's floating.

³ T. Davis, *General View of the Agriculture of the County of Wiltshire* (1794), pp. 20, 27, 85, 105.

⁴ W. Marshall, *The Rural Economy of the Southern Counties* (2 vols. 1778), II, 318-19; W. Cobbett, *Rural Rides* (Everyman ed.), II, 40. Cf. pp. 31-2. J. Luccock, *The Nature and Properties of Wool* (Leeds, 1805), p. 273; W. Youatt, *Sheep: Their Breeds, Management and Diseases* (1837), p. 245.

⁵ W. Folkingham, *Feudigraphia* (1610), pp. 23, 29; J. Norden, *The Surveiors Dialogue* (1618), p. 229; J. Worlidge, *Systema Agriculturae* (1669), p. 66; H. C. Brentnall, 'A Longford Manuscript', *Wilts. Arch. Mag.* LII (1947-8), 18.

⁶ P.R.O., Star Chamber, H. VIII, bdl. 6, nos. 74, 255; bdl. 23, no. 86; Eliz., bdl. A. 11, no. 8; Req. Eliz. bdl. 105, no. 10; Wards, Feodaries' Surveys (Wilts.), unsorted bdl., confession, case of Thomas Hearne of Netheravon; Wilts. Rec. Off., Savernake Coll., box 13, bdl. 99a, Court Book of Collingbourne Ducis, entry for 25 April 1593.

that is, bred to walk, unlike sheep intended for fattening that were later bred to stand still. The improvement of the carcass was not a primary object of the breeders and was largely incompatible with the purpose of sheep in this district, where they had to be hardy enough to get their food on a close-fed pasture on the downs, to walk two or three miles for that food and then carry their dung back the same distance to the fold on the tillage. The breeding lamb was regarded as a necessary consequence of, rather than the reason for the keeping of the flock, a supply of ewe lambs being needed only for its maintenance. The wether lambs lived equally hard with the ewes during the summer and were sold in the autumn for the wether stock of those who had no convenience for breeding. Ewes that were too old to breed were sold off for fattening. On this system little attention was given to the carcass of either the ewe or the lamb.¹ The sheep were large, with a big, clumsy head and large eyes, a Roman nose, a long, arched face, wide nostrils, horns (in both sexes) falling back behind the ears, a wide and deep chest, a long, straight back and legs looking awkwardly long but sturdy and with great bones. Legs and faces were white and fronts and sides untufted and flat. With its long, light carcass, the sheep was a naturally active and agile climber and walker. It could pass with ease up and down the hills, often abruptly, that separated the nightly fold from the daily pasture. A greedy feeder, it was slow to fatten, though, when fat, it sometimes attained great weight, the mutton being of tolerable quality. The wool was of medium length, white and fine, and the fleece weighed about two pounds. The underparts, however, the belly and shanks, were quite free of wool from sympathy with the warm dry soil, and there grew here only short hair. It was a strong, healthy, intelligent animal, well suited to conditions on the downs and possessing the greatest folding quality, the propensity to drop only at night when folded on the arable. But it was so much the less suited to the production of wool and mutton.²

Most big farmers had private flocks, numbering usually between four and fourteen hundred, although larger ones were not unknown.³ A private flock could hardly be less than about four hundred, because great numbers had to be concentrated in the fold on the arable. The man with only a few score sheep could not fold his arable with these alone, and it would not be worth his while to keep his own shepherd. The yardlander rarely had pasture for more than fifty or so sheep, and most farmers had too few sheep for the fold.⁴ Therefore, in order to be able to fold their arable and to be able to grow corn, the small

¹ Davis, *op. cit.* pp. 20, 27, 127.

² *Op. cit.* p. 23; 2nd ed. (1813), p. 137; Marshall, *op. cit.* II, 345-6; Luccock, *op. cit.* pp. 272-3; Youatt, *op. cit.* pp. 244-5; D. Low, *On the Domesticated Animals of the British Isles* (1845), pp. 120-2; W. H. Hudson, *A Shepherd's Life* (Everyman ed.), p. 10; R. Wallace, *Farm Livestock of Great Britain* (Edinburgh, 1923), pp. 666-7; W. Ellis, *A Compleat System of Experienced Improvements made on Sheep* (1749), pp. 41-2.

³ See, for example, P.R.O., Exch., Land Revenue, Misc. Books, vol. 191, fo. 129v.; vol. 203, fo. 377; B.M. Add. Roll 37571, fo. 1; Wilton MSS., Surveys of Manors 1631, vol. 1, Survey of Chalk, fos. (3), 2 (6); Surveys of Manors 1632-3, Survey of Alvediston, fo. 2; Survey of Bishopstone, fo. 2; Survey of Barford St Martin, fo. 1; Devizes Museum, Liber Supervisus Amesbury Earls and Priory, fo. 18; Amesbury Survey Book 1574; Survey of Amesbury 1635, fo. 46; Wilts. Rec. Off., Savernake Coll., box 12, bdl. 98a; R. C. Hoare, *History of Modern Wiltshire* (6 vols. 1822-44), Hundred of Amesbury, p. 65; C. R. Straton (ed.), *Survey of the Lands of William First Earl of Pembroke* (Roxburghe Club, 2 vols. 1909), I, 69-71, 270-1, 300; R. B. Pugh (ed.), *Calendar of Antrobus Deeds before 1625* (Rec. Brch., Wilts. Arch. Soc., Devizes, 1947), pp. 109-10.

⁴ See, for example, Straton, *op. cit.* I, *passim*; E. Kerridge (ed.), *Surveys of the Manors of Philip First Earl of Pembroke and Montgomery* (Rec. Brch., Wilts. Arch. Soc., Devizes, 1953), *passim*.

farmers of most townships put their sheep into a common flock.¹ Thus they could form a folding flock as good as or better than those of the large farmers. For the sustenance and employment of this common flock it was necessary for the tenantry to treat the whole of their open land, meadow and pasture as one single unit for all purposes of flock and fold. They had also to consult together, to abide by mutually agreed regulations and form and administer a common purse. That a small flock was worthless for folding and that folding was the principal purpose of the flock was shown by the fact that some substantial farmers preferred to entrust their sheep to the common shepherd.² What the farmer with a few hundred sheep lost by putting them before the common shepherd was more than compensated by the benefit of the fold of the town flock, and the advantage of the middle sort of farmer was the compelling necessity of the small man.

The small tenantry farmers usually agreed to confine themselves to one or two shepherds chosen by a majority voice.³ The common shepherd managed the flock according to the decisions of the tenantry themselves. A shepherd's orders might lay down that he keep the flock himself or, if need be, by deputy, and not leave it to boys and girls. If a sheep sickened or died, he had to bring it home and inform the owner at his house. The shepherd had to take charge of the hay provided by the tenantry. The fold had to be pitched and the sheep penned according to the orders made by the tenants. He had to prevent or cure scab and other diseases and ward off wool-pickers and present them in court. If a sheep died as the result of stone-throwing or similar misadventure, or if he failed to inform the owner in due form, the shepherd had to pay compensation, which might be stopped out of his wages. The tenantry levied a rate on themselves, according to the number of sheep put in, for the payment of the shepherd and for the purchase of hay if necessary. Each tenant had to provide a quota of hurdles under penalty of losing the benefit of the fold. In July or August each man had to send 8 cwt. of his best hay to the fold for every twenty sheep to be wintered or withdraw his sheep and lose the fold. All the fields were to be for the exclusive use of the sheep, but no couples were to be put in unless reared on the owner's tenement. If sheep goings were let, first option had to be given to the lord of the manor or his tenants. No sheep were to be allowed in the common except before the common shepherd, who was empowered to impound trespassers. By these and similar orders, agreed by the tenants and enforced by the manor court, the common flocks and folds were regulated.⁴

Whether the flocks were common or in severalty, there is no reason to suppose the management remarkably different. The sheep went on the downs in the day-time throughout the year. After harvest they had the run of the stubbles and they had the herbage of the summerfield until it was ploughed for wheat. When the ewes, the most favoured of the flock, were near yeanning, the owners took them to enclosed meadows or pastures, or to the watermeadows where these had been floated. By the time they had yeanned, the meadows were ready to receive them and their lambs. When the meadow was fed off and laid for hay, the sheep passed to the summerfield. The rams, in common flocks provided by

¹ Worlidge, *op. cit.* p. 66.

² Devizes Museum, Court Book, Amesbury Erledom, commencing 27 Mar. 25 Eliz., entry for 15 Mar. 28 Eliz.

³ Wilton MSS., Court Book of Various Parishes 1633-4, fo. 46v.

⁴ Marshall, *op. cit.* II, 319, 350-1; Wilts. Rec. Off., Courts Baron of Sir Laurence Hyde, 7 April 1609 and 23 Sept. 1629; Wilton MSS., Court Book of Various Parishes 1633-4, fo. 6; Canon Bennett, 'The Orders of Shrewton', *Wilts. Arch. Mag.* xxiii (1887), 36-9; and as n. 2 above.

the commoners, were put to the ewes in about October, so that the couples might have advantage of the first bite of the meadows. Hogs and theaves were not usually put on the meadows, but kept on the higher downs all the year round, with hay or straw scattered for their relief in the cold weather.¹ Sometimes the sheep were divided into separate ewe, hog and wether flocks, but they all passed most days of the year on the downs, descending at night to be folded on the arable.² The fold itself was set large, especially for the ewes and lambs, one serving for 300 couples or more, with three or four square yards to the couple. A thousand sheep or five hundred couples would well fold a tenantry acre in a single night, the size of the fold being regulated by that of the field, so that all the land might be manured in time for sowing. The fields were safe for sheep at all times of the year and folding the arable was a continuous process, one night being allowed for each acre that was to be cropped.³ The tenantry arable fields, like most of those in severalty, lay open, so that the fold could move over each acre in the field in turn. Thus, as the acres were dispersed and intermingled, each man's land was dunged in turn and more or less simultaneously, so that each might start to sow at about the same time. Hence the advantage of keeping the lands dispersed in common field. The fold moved over the field not skipping any man's land and entering the field at different ends in alternate years. To turn the fold out of its course was a serious offence. In the fold at night the sheep had leisure to digest their food and in the morning they were able and eager to climb the hills to their daily pasture. In this way the downs were robbed for the sake of the tillage, but as the arable was maintained by folding, so were the downs by feeding.⁴

The timing and course of the fold had to be integrated with the other farming operations, particularly with ploughing and sowing. Land in the barley field could not be fallowed until it had been folded, nor in the wheat field until it had been folded or manured with the dung-pot. Muck was widely used in the lower part of the wheat field, but in the upper part and in the barley field the fold was considered essential. Although the fold was good for crops all the year round, it was not at its best until the ewes and lambs began to feed the meadows just before barley seed. The barley depended on the fold of the couples coming straight from the meadows with their quick grass. Also the ewe fold was preferred to the wether on account of the extra urine. Thus the wheat had the benefit of the fallow, but the barley had the better folding. As soon as it had been folded, the land was ploughed and sown, but even after sowing the fold was not to be discarded. A sheepfold on the new sowings was excellent for consolidating the loose soil. Finally, when the corn had begun to shoot, it was not unusual to fold sheep on it, to eat off some of the leaf and to trample the corn firmly in the ground. This somewhat retarded growth, but this was advantageous in some seasons, and the sheep had a bite of excellent feed. When

¹ Davis, *op. cit.* (1794), pp. 16-17; Youatt, *op. cit.* p. 245; Marshall, *op. cit.* II, 346-7; Straton, *op. cit.* I, 311-12; L. Mascall, *The First Booke of Cattell* (1587), p. 237; Wilts. Rec. Off., Savernake Coll., box 13, bdl. 99a, Collingbourne Kingston Survey Book, fos. 51-2.

² Davis, *op. cit.* p. 61; Youatt, *op. cit.* p. 245; J. Aubrey, *Natural History of Wiltshire* (ed. J. Britton, 1847), pp. 108-9; C. V. Goddard, 'Customs of the Manor of Winterbourne Stoke', *Wilts. Arch. Mag.* xxxiv (1905-6), 214-15; P.R.O., Star Chamber, H. VIII, bdl. 23, no. 186; Exch., K.R., Deps. by Comm., 2 Jas. I, Hil. 3.

³ Davis, *loc. cit.*; Marshall, *op. cit.* II, 349; Cobbett, *op. cit.* II, 41.

⁴ Youatt, *op. cit.* p. 245; Goddard, *art. cit.* p. 212; Devizes Museum, Court Book, Amesbury Erelodom, commencing 27 Mar. 25 Eliz., entry for 15 Mar. 28 Eliz.; B.M. Add. MSS. 23152, fos. 14v-15; Wilts. Rec. Off., Courts Baron of the Hydes, Sept. 1610.

the corn was cut and carted, the fold returned to eat off the stubble. Thus there was an intimate connection between sheep and corn.¹

It may be seen that the yield of corn depended directly on the numbers and size of the sheep used in the folds. But these in turn depended on the amount of feed available in the winter. The size of the flock throughout the year was determined by how many sheep could be overwintered. In the Middle Ages there had been no escape from this vicious circle, which was only broken by the floating of the watermeadows.

From the latter part of the seventeenth century to the latter part of the nineteenth the overwhelming majority of the bottom meadows in this district were floated. The floated watermeadow was a hot-bed for grass. April, the month between hay and grass, was the crucial time of the farming year. It was at about this time that any shortage of fodder was most likely to be felt. The livestock the farmer was able to overwinter depended on the feed available at this time, and lambing was not possible until the spring grass had sprouted. But the floated meadow ended this bottleneck by giving earlier grass and more hay. Two main types of floating were used in England: the catchwork system for land on the inclines of hills watered by small brooks, and the flowing system for low-lying ground near rivers. The flowing meadow, the more expensive of capital, was generally used in the Chalk country. In floating the watermeadow, a large weir or hatch was constructed to dam the river and control the flow of water. When the water was allowed through the hatch it passed down a main trench, work or duct to the meadow and then down smaller ditches or carriages branching out from the main all over the 'pitch of work', which was thus all floated from a single hatch. In the main and branch carriages, stops were erected to obstruct the course of the water and keep it high enough to flow through the sluices into the carriages that took it over the surface of the land. These carriages, some thirty or forty feet apart, depending on the lie of the land and the quantity of water available, intersected the whole pitch of work. Between each pair of carriages was a drain that took off the water at the other end of the meadow and passed it to a main drain that rejoined the river below the pitch of work. Thus the whole meadow was covered with a 'regular disposition of the water-carriages and water-drains, which in a well laid-out meadow, bring on and carry off the water as systematically as the arteries and veins do the blood in the human body'.² The lay-out of the works depended on the lie of the land to be floated and whether the meadows were common or in severalty. There were different patterns for a variety of different circumstances. But whatever the design, the expense was considerable. The whole pitch of work had to be levelled and prepared under the supervision of an expert 'floater'. The land had to be gathered and twice-gathered in ridge and furrow, and many

¹ Davis, *loc. cit.*; Worlidge, *op. cit.* p. 66; Norden, *op. cit.* p. 229; E. Lisle, *Observations in Husbandry* (1757), pp. 13-14, 21, 308, 321; Wilton MSS., Court Book of Various Parishes 1633-4, fo. 47.

² Davis, *op. cit.* frontis., pp. 30ff.; R. Vaughan, *Most Approved and Long Experienced Water-Workes* (1610); E. B. Wood, *Rowland Vaughan His Books* (1897); T. Wright, *The Formation and Management of Floated Meadows* (Northampton, 1808); *An Account of the Advantages and Method of Watering Meadows* (Cirencester, 1789), pp. v-vii; W. Smith, *Observations on the Utility, Form and Management of Watermeadows* (Norwich, 1806), pp. 19-20, 70ff.; E. H. Carrier, *The Pastoral Heritage of Britain* (1936), pp. 117ff.; B. W. Adkin, *Land Drainage in Britain* (1933), pp. 300ff.; Worlidge, *op. cit.* pp. 17ff.; J. Browne, *A Treatise on the Irrigation or the Watering of Land* (1817); G. Boswell, *A Treatise on Watering Meadows* (1801), pp. 34ff.; Marshall, *op. cit.* II, 331ff.; W. Blith, *The English Improver Improved* (1652), pp. 14ff.; W. Marshall, *A Review of the Reports to the Board of Agriculture from the Western Department of England* (York, 1810), pp. 441-2.

works dug and constructed. All the carriages and drains had to be floored and walled with timber. Hatches, sluices and stops had to be made of timber and iron. Finally, grass had to be seeded over the meadow. The cost of maintenance, however, was not great compared with the improved values, estimated at between three and sixty-fold increases, varying according to the previous state of the land.¹

The effect of the rains on the height of the water-table in the Chalk country is to cause an increase in the flow of the rivers in the late autumn and early spring. The floods bore down with them much chalk sediment and the washings from villages in the course of the stream. The greater the suspension, the more valuable the water for floating. More important, however, the water flowing over the meadows provided a warm blanket for the grass, protecting it from the winter frosts. When the meadow was floated it was covered by an evenly distributed sheet of flowing water to the depth of about one inch. Thus the grass could grow even during the sharpest frosts, and, thanks to the chalky sediment, grew luxuriously.² When the autumn rains had swelled the river, the floater passed the stream in a sheet over his meadow and kept it flowing as long as sharp frosts continued. Occasionally the flow had to be suspended for brief periods to allow air to the grass, but otherwise the meadow was continually covered. Normally the forced growth of grass, now five or six inches high and luxuriant feed, though rather stalky, was ready to be fed by sheep about the middle of March, long before an early bite was elsewhere available. After airing for a day or two, the meadows were ready for the sheep. By about the end of April the sheep would have fed the meadow off close, and the flow of water would be resumed for a few days before the meadow was put up for hay. By June the meadow would be ready for mowing, the grass being cut young. Watermeadow hay was excellent for sheep and cattle, and the crop was about four times as great as from an equal area of unfloated wet meadow. Moreover, watermeadow hay could be cut regularly, since growth was unaffected by drought. If the need for more hay was great, further watering could produce a second and a third crop, so that the farmer with floated watermeadow need never fear for winter fodder. Most farmers, however, were content with one or possibly two hay crops and preferred to put their dairy cattle in the meadows in high summer and early autumn. To gain the greatest advantage from floating, cows had to be put in the meadows in the early autumn, for they were then unsafe for sheep. In September the meadows were eaten off bare with cows and in October the carriages and drains were scoured and repaired ready for the admission of the highly-prized November floodwaters.

The great advantage of the floated watermeadows in the Chalk country was in the early bite of grass they provided for the ewes and lambs, whose yeanning was henceforth timed to coincide with the opening of the meadows, of which they then had the exclusive use. Thus the feed of the ewes and lambs was improved and early yeanning made possible. The grass was hurdled out to the couples, with creep hurdles to allow the lambs to feed forward. While the couples were on the watermeadow in the day, they were folded on the barley land at night. As they were not allowed on the floated meadow with empty bellies or while the dew was still on the grass, their hours of feeding were from

¹ Boswell, *op. cit.* pp. 78, 118; Wood, *op. cit.* p. xiii; Wright, *The Formation and Management of Floated Meadows*, p. 89; Davis, *op. cit.* p. 34; Blith, *op. cit.* p. 41; Kerridge, *op. cit.* pp. 138-40; Vaughan, *op. cit.* fo. 2 v.

² Wright, *op. cit.* pp. 29, 49 ff.; Brentnall, *art. cit.* p. 18. See also previous note.

ten or eleven in the morning to four or five in the afternoon. If the grass was still too damp, they were given some hay at the same time. It is clear that the floated watermeadow was essential to the development of the sheep-and-barley farming of the Chalk country but 'none but those who have seen this kind of husbandry, can form a just idea of the value of the fold of a flock of ewes and lambs, coming immediately with bellies full of young quick grass from a good watermeadow, and particularly how much it will increase the quantity and quality of a crop of barley. The value of it may fairly be taken at the value of a quarter of barley' per acre. It was not for nothing that the sheep in watermeadows were never suffered to lie down or drop their dung and urine on the meadow, but when seen to be full and disposed to lie down, were driven in haste to the arable.¹

Floating did not merely improve old meadowland, for all sorts of land could be floated and marsh and arable converted to artificial meadow. Finally, since the milk and early grass feeding largely determine the constitution of young live-stock, it was accounted one of the greatest virtues of the floated watermeadow that it helped to increase the size of the Wiltshire horned sheep between the seventeenth and nineteenth centuries. Without floating, the country could not have supported so many sheep of so great size.²

Thomas Davis and William Marshall both speculated on the origins of the floated watermeadows, but neither knew the date of their first introduction.³ Nor can it be traced in the agricultural writers from Fitzherbert to Norden, although there are not wanting allusions to various methods of watering meadows and pastures.⁴ The sole exception to this, however, and the first clear reference to floating, concerns what was claimed to be the invention and first use of the technique in Herefordshire at the end of the sixteenth century. Davis says that floating was generally introduced into the Chalk country from 1650 to 1750, but disclaims knowledge of their first introduction. John Aubrey, however, remembered the first floating of the meadows at Wylve and Chalk, as he thought, about the year 1635. He also described the watermeadows of Salisbury and of the Hungerford-Marlborough district and remembered 1646 as the date of the floating.⁵ Allusions to the floating of meadows at Shalbourne, Broad Hinton, Damerham, Downton Newcourt and Mildenhall are also found in various records between 1639 and 1661.⁶ Manorial surveys give circumstantial evidence of their introduction in Chalk, Chilmark, Netherhampton and Dinton between 1605 and 1632, as well as clear evidence of floating at Dinton for some time

¹ Davis, *op. cit.* pp. 35, 37 ff.; Smith, *op. cit.* p. 70.

² Improvement was the effect of culling, better feeding and careful selection of rams.

³ Davis, *op. cit.* pp. 30-1; Marshall, *Southern Counties*, II, 342-3; J. E. Jackson, 'The Vale of Warminster', *Wilts. Arch. Mag.* (1878), xvii, 301-2.

⁴ Folkingham, *op. cit.* pp. 27, 33; Fitzherbert, *The Boke of Surveyinge and Improuementes* (1534), fo. 43 v.; Norden, *op. cit.* pp. 199-200, 205-6. The remains of sixteenth-century watered meadows, perhaps made on the Italian plan and certainly not floated, may be seen at Babraham, near Cambridge. See Smith, *op. cit.* pp. 116-17. Cf. Ernle, *English Farming Past and Present* (1927), p. 114.

⁵ Davis, *op. cit.* p. 30; Aubrey, *op. cit.* pp. 51, 104; Wood, *op. cit.* pp. xiii ff, 126; G. E. Fussell, *Old English Farming Books From Fitzherbert to Tull* (1947), pp. 32-3; Smith, *op. cit.* pp. 116-17; Ernle *op. cit.* p. 114;

⁶ Marshall, *Western Department*, pp. 403, 440-2; J. Aubrey, *Wiltshire Topographical Collections*, ed. J. E. Jackson (Devizes, 1862), p. 55; *Abstracts of Wilts Inquisitiones Post Mortem temp. Car. I*, ed. G. S. and E. A. Fry (British Record Society, 1901), p. 8; *Records of the County of Wilts*, ed. B. H. Cunningham (Devizes, 1932), pp. 129, 139 40; Devizes Museum, Deed Room, BH/8; Wilts. Rec. Off., Acc. 84, Clayton MSS., nos. 6, 8; Savernake Coll., box 27, bdl. 248.

before the middle of the century.¹ In 1632 the tenantry of Wyllye had entered in the court roll of the manor their agreement for the floating of the common meadows by John Knight of Stockton. The expenses of this scheme were borne by a common purse and the floating was regulated in the manor court, as later became the custom throughout the district. The description of the technique and the pitch of work in this agreement leaves no doubt that floating was already well understood in this country in 1632 and that Knight had had considerable experience of floating.² In other court orders from this time onward the floating of common and mixed common and severalty meadows can be traced.³ And there is no reason to suppose that the floating of severalty and common lands was marked by any precedence in time of the one over the other. Both the initial works and subsequent practice called for some degree of co-operation between all the farmers of the township. It would seem that floating started in the early seventeenth century, spread widely in the second and third quarters of the century and had become standard practice by the early eighteenth.

The floating of flowing watermeadows in the seventeenth century increased the supply of hay by some four or fivefold, made possible earlier lambing and increased sheep stocking, ensured a supply of hay in drought and, by integration with the sheep-and-corn husbandry of the district, promoted increased yields of corn, especially of barley, thus constituting an improvement of the first order.

¹ Wilton MSS., Surveys of Manors 1631, vol. I, Survey of Chalk, fos. 9 (13) *et passim*; Survey of Dinton and Teffont, fos. 8 (9), 13 (14), 19 (21) *et passim*; vol. II, Survey of Netherhampton, fos. 2 (3), 10 (11)–12 (13) *et passim*; Surveys of Manors 1632–3, Survey of Chilmark and Rudge, fos. (3), 2 (5).

² Kerridge, *loc. cit.*; Wilton MSS., Surveys of Manors 1631, vol. II, Survey of Wyllye, *passim*; Court of Rolls of Various Manors 1632, box 25, m. 4, Wyllye 10 Sept. 1632; Court Book of Various Parishes 1633–4, fo. 2.

³ E.g. Wilton MSS., Court Book of Various Parishes 1633–4, fo. 41; Court Rolls of Manors 1689–1754, box II, vol. 2, Court Book of Burcombe and Ugford, pp. 40–1.

SOME INFLUENCES AFFECTING THE DEVELOPMENT OF SANITARY LEGISLATION IN ENGLAND

By B. KEITH-LUCAS

IT is impossible to read any account of the sanitary conditions of the industrial towns of nineteenth-century England without realizing the extreme importance of the sanitary revolution which has taken place in the last hundred years. The sources of this revolution have, however, been somewhat inadequately described by historians. Too often writers on the subject have given the impression that the whole impetus for reform came from a small group of enthusiasts in London, filled with zeal for the 'Sanitary Idea' and working through the medium of the Poor Law Commissioners and the Health of Towns Association.

The importance of these men—Chadwick, Southwood Smith, Kay, Morpeth, Playfair, Ashley and others—is not denied. But, it is suggested, there were other impulses and other leaders, mostly in the provincial towns of the Midlands, of whom not enough has been said.

Most of the existing accounts of the development of sanitary legislation in England are based to a great extent on the records of the central authorities; the report of the Select Committee on the Health of Towns (1840), Chadwick's Report on the Sanitary Condition of the Labouring Population (1842), and the Reports of the Royal Commission on the State of Large Towns (1844 and 1845); on the reports of the Health of Towns Association and of the Central Board of Health; and on the writings of Chadwick, Southwood Smith and Sir John Simon. These authorities are the best, but none of them, from the nature of the circumstances, is concerned to describe the agitation of earlier years, or the state of sanitation in those towns which had already begun to improve their own conditions. The reports on the sanitary conditions of the poor were intended to show the upper and middle classes how appalling were the conditions in which many of the people of England then lived. They naturally recorded the details of the bad towns and said little of the better. They drew attention only to the worst. To some extent subsequent writers have selected from those reports only the most striking, and so the most insanitary, of the conditions there described. On the other hand few writers have described the work that was done under the impetus of local opinion to improve the provincial towns of England. F. H. Spencer's *Municipal Origins* (1911), is much the best study of the local Improvement and Paving Acts before 1835, and deserves to be better known than it is; the Webbs' *Statutory Authorities for Special Purposes* (1922), M. C. Buer's *Health, Wealth and Population, 1760-1815* (1926), and F. Clifford's *History of Private Bill Legislation* (1885) deal with some aspects of the matter. Beyond this, there is little published material which deals directly with this subject.

Students of nineteenth-century social conditions are apt to imagine that not until the advent of Chadwick and the 'Sanitary Idea' was it realized that health and living conditions were closely connected. In fact, without going back before the eighteenth century, one can find ample evidence that the essential nature of the sanitary problem was clearly understood. A series of writers demonstrated and explained the dangers of insanitary living conditions; the eccentric Dr John

Armstrong did so in verse;¹ others did so in pamphlets and books; James Mackenzie published his *History of Health and the Art of preserving it* in 1758, and expounded in that work the dangers of insanitary dwellings, and above all the 'general and pernicious custom of permitting common and crowded burial places to be within the precincts of populous cities'.² Meanwhile John Spranger,³ Jonas Hanway,⁴ Sir Charles Whitworth,⁵ and others discussed at some length the sanitary problems of Westminster.

Many writers might be quoted to show that the physicians of the first half of the eighteenth century were fully aware of the dangers of bad sanitation and close unventilated dwellings, even though they did not yet understand the means by which infection travelled. It was not, however, until the 1770's that the subject of public health was studied in a really scientific way. The basis of the new method of study was the statistical evidence contained in the Bills of Mortality published for Manchester and other towns.⁶ Early in 1773 Benjamin Franklin drew attention to the problem in a letter to his friend Dr Thomas Percival of Manchester.⁷ Whether, as has been suggested, this letter was responsible for arousing Percival's interest, cannot now be determined. But from this time he showed an increasing interest in the problem. In the same year he published his proposal for establishing more accurate and comprehensive Bills of Mortality in Manchester, suggesting that the records should include a statement of the cause of death.⁸ These suggestions were adopted in other towns, including Chester, Liverpool and Warrington.⁹

In these Midland towns a number of men with inquiring minds began to investigate the problems of public health and hygiene. Mostly physicians and dissenting clergymen, they were all, or nearly all, friends of Joseph Priestley, and, like him, Radical opponents of the Government and champions of political liberty; Dr John Haygarth of Chester, the Rev. John Aikin of Warrington, Dr Matthew Dobson of Liverpool, the Rev. Richard Price of London, eminent as a statistician, and Priestley himself. The largest group of these pioneers was to be found in Manchester, where Percival and others interested in such matters had in 1781 founded the Literary and Philosophical Society, for the study and discussion of scientific subjects.¹⁰ Their conclusions were published in a series of pamphlets and articles. Some of these appeared in the *Memoirs of the Manchester Literary and Philosophical Society*, others in the *Philosophical Proceedings of the Royal*

¹ *The Art of Preserving Health* (1744).

² *Op. cit.* 2nd ed., p. 369.

³ *A Proposal or Plan for an Act of Parliament for the better Paving, Lighting and Cleansing the Streets etc. of Westminster* (1754).

⁴ *A Letter to Mr John Spranger on his excellent Proposal for paving, cleansing and lighting the Streets of Westminster and the Parishes in Middlesex* (1754).

⁵ *Observations on the new Westminster Paving Act* (1771).

⁶ Bills of Mortality were first published for London in the sixteenth century. In London the term 'the Bills of Mortality' came to be commonly used as a description of the metropolitan parishes to which these statistics applied.

⁷ Quoted in *Works, Literary, Moral and Medical of Thomas Percival, M.D.* (1807), III, xxxii.

⁸ Dr Thomas Percival, *Proposals for establishing more accurate and comprehensive Bills of Mortality in Manchester* (1773).

⁹ Dr Percival, *Observations on the State of Population in Manchester* (1773, 1774). See also John Robertson, *Observations on the Mortality of Children* (1827).

¹⁰ Percival was President, 1782-6 and 1789-1806; John Ferriar was Secretary, 1788-92; Thomas Butterworth Bayley was a foundation member; Robert Owen became a member in 1793; Joseph Priestley and Benjamin Franklin were both original honorary members. See *Memoirs of the Manchester Literary and Philosophical Society*, 3rd series, vol. IX (R. Angus Smith, *A Century of Science in Manchester*).

Society. Among the latter were a paper by Dr Price on 'Differences between the duration of Human Life in Town and Country Parishes and Villages',¹ Percival's articles on the State of Population in Manchester,² and other papers on similar subjects by Aikin and Haygarth.³

These statisticians proved beyond doubt the effect on human life of the conditions which then existed in industrial towns. They were, however, not mere academic observers; Percival, Ferriar and Bayley, for instance, played a considerable part in improving the sanitation of Manchester. In 1784 there was an outbreak of fever at Radcliffe and the Lancashire Quarter Sessions called in Dr Percival to advise them. He urged them to turn their attention to the sanitary conditions in the cotton mills.⁴ A few years later he put forward a scheme for improving the sanitary conditions of the poorer parts of Manchester. In 1796 a Board of Health was constituted in the town, with such successful results that similar boards were established elsewhere.⁵

The memorial which Dr Percival presented to the Manchester Board of Health is of interest in itself, as a further indication of the degree to which he and his colleagues were already doing what was to be done on a larger scale half a century later. On 7 January 1796, he wrote:

The objects of the Board of Health are threefold:

- i. To obviate the generation of diseases:
- ii. To prevent the spreading of them by contagion:
- iii. To shorten the duration of existing diseases and to mitigate their evils, by affording the necessary aids and comforts to those who labour under them.

Under the first head are comprehended—The inspection and improvement of the general accommodations of the poor; the prohibition of such habitations as are so close, noisome, or damp, as to be incapable of being rendered tolerably salubrious; the removal of privies placed in improper situations; provision for whitewashing and cleansing the houses of the poor twice every year; attention to their ventilation by windows with open casements, etc.; the inspection of cotton mills, or other factories at stated seasons, with regular returns of the conditions, as to health, clothing, appearance and behaviour of the persons employed in them... the limitation and regulation of lodging houses... the establishment of public warm and cold baths... provision for particular attention to the cleaning of streets which are inhabited by the poor and for the speedy removal of dunghills, and every species of filth.⁶

Dr Ferriar became the principal medical worker with the Manchester Board, and gave particular attention to the problem of the spreading of infection through common lodging houses, and to the improvement of cellar dwellings.⁷ It is, however, clear that the difficulties were enormous, and the opposition from the owners of cottage property was powerful. Despite this, the demand for sanitary reform was strong. Writers were advocating the extension of statutory control,⁸ and the neighbouring town of Liverpool submitted a Bill to Parliament

¹ *Philosophical Transactions of the Royal Society*, vol. LXV, 424.

² *Ibid.* LXIV, 54 and LXV, 322.

³ *Ibid.* LXIV, 438 and LXV, 85.

⁴ The Rev. Sir William Clerke, *Thoughts upon the Means of preserving the Health of the Poor by Prevention and Suppression of Epidemic Fevers*, addressed to the Inhabitants of the Town of Manchester (1790).

⁵ *Works, Literary Moral and Medical, of Thomas Percival, M.D.* (1807), p. cxcix.

⁶ *Works, Literary, Moral and Medical of Thomas Percival, M.D.* (1807), p. cclvii.

⁷ Edward Brockbank, *John Ferriar* (1950); John Ferriar, *Medical Histories and Reflections* (1795), I, 138.

⁸ E.g. John Robertson, *Medical Police* (1812).

in 1802, aimed at controlling the dark courts and cramped cellars in which so many of the people lived.¹ It was, however, opposed by the property owners, and rejected by Parliament.

This Liverpool Bill was too drastic for the Parliament of 1802. Much had, however, been achieved in many towns through the medium of Improvement or Paving Acts. Even in the middle of the eighteenth century the typical Acts contained a number of important sanitary provisions. In a town of that period the first sanitary reform that was needed was to pave the streets. This was not merely a matter of the convenience of pedestrians; without drains the easiest way of disposing of household rubbish was to throw it into the road. The unpaved streets became quagmires of filth, and breeding-grounds of disease. Once the streets were paved a number of other sanitary improvements might follow; prohibition of nuisances, regulation of the work of scavengers, control of accumulations of manure, and the regulation of offensive trades. These, and other similar provisions, were the common clauses of eighteenth-century Paving and Improvement Bills, with additional clauses not directly affecting Public Health—street lighting, paid constables and street improvements.

From about 1770 or 1780 the number of these Improvement Acts increased rapidly;² at the same time they became more concerned with health and hygiene; a number of them specifically declared in their preamble that they were passed for the benefit of the health of the inhabitants.³ More attention was paid to problems of drainage, and it became common for the Acts to vest the existing sewers in the Commissioners, and to give them powers to construct a general system of sewers and drains for the town.⁴

The fees payable by the promoters of these Improvement Acts were heavy, and the trouble involved was considerable. It is reasonable to assume that the expense and trouble would not normally be incurred except under the impulse of a genuine desire to improve the conditions of the town. Further evidence of the continued interest shown by the promoters and Commissioners is to be found in the number of amending Acts; these indicate not only the experimental nature of much of the legislation, but also the determination of the authorities to overcome difficulties which arose.

Inspection of the Minutes of the Commissioners is generally less conclusive, partly because the carrying out of the improvements, and even the collecting of tolls and rates, was usually done entirely by contractors, and not by the Commissioners themselves. These records do, however, show that a number of Commissioners in each town thought the matter of sufficient importance to give their time to attending regular meetings, and also that some offenders against the sanitary code were punished by the magistrates. How many offenders escaped proceedings we do not know.

An example of a particularly well-managed town is Worcester. The first Improvement Act for that city was obtained in 1770.⁵ It starts with the recital that 'Whereas it would be of great advantage to the said City, and contribute to the Health of the Inhabitants if the same was sufficiently supplied with Water, and the Sewers and Drains kept properly cleansed and repaired...'

¹ Brian D. White, *A History of the Corporation of Liverpool* (1951), p. 33.

² For a detailed analysis of the Acts see S. and B. Webb, *Statutory Authorities for Special Purposes*, and F. H. Spencer, *Municipal Origins* (Dr Spencer worked with the Webbs in collecting material for their book).

³ E.g. Winchester, 1771; Worcester, 1770; Southampton, 1770.

⁴ E.g. Newport, I.O.W., 1786; Kidderminster, 1813; Norwich, 1806; King's Lynn, 1803.

⁵ 10 Geo. III, c. 22.

It then proceeds to invest the Commissioners, appointed by the Act, with the normal powers to achieve these objects. Further amending Acts were obtained in 1780¹ and 1823² neither of which made any substantial difference to the powers of the Commissioners. At first progress seems to have been slow. In 1782 the author of the *Collections for the History of Worcestershire*³ described the work which was projected, but complained of the delay which had occurred.

Twenty-six years later considerable progress had apparently been made: 'Great pains have of late been taken and great expenses incurred, to clean and enlarge the sewers, and to supply the City with water. . . .'⁴ By 1828 yet more had been achieved; the *Midland Medical and Surgical Reporter*⁵ stated that 'there is no city in the kingdom, perhaps, more improved in regard to drainage, a good supply of water, and a fine circulation of air in the streets, than Worcester. This has been chiefly effected by the authority given under the paving, water and lighting acts'; while the new edition of the *Concise History of Worcester*⁶ declared that 'the streets are well cleaned and the sewers kept in good order. Few cities in England present altogether a more cleanly exterior'. Similar progress was being made in some, but not all, other towns.⁷ In London Michael Angelo Taylor was agitating for the passing of the Metropolitan Paving Bill, which, passed in a reduced form in 1817, is still in force as an important part of the sanitary code of London.

The nineteenth century brought two new factors; water-closets and cholera. Water-closets were introduced in about 1810, and began to be generally employed about 1830.⁸ Cholera first appeared in England in 1832. These two new elements in the problem were to bring about a revolution in English sanitation which was to be directed by Edwin Chadwick. But meanwhile, before he began his campaign, others were pointing out the need for new methods of sanitation. Among the most important of these was Henry Belinaye, who in 1832 published a book, *The Sources of Health and Disease in Communities*. Belinaye, who was a fashionable London surgeon, had made a deep study of the causes of disease, and of cholera in particular, both in England and abroad. He declared the principle that 'sewers can not be too deep nor the course of their waters too rapid. Privies should always communicate with the common sewer.'⁹ He went on to recommend sanitary legislation which should include:

1. Compulsory declaration of infectious disease.
2. Removal of nuisances and dungheaps.
3. Prohibition of cemeteries in towns.
4. Prohibition of slaughterhouses in towns.
5. Periodic whitewashing of the insides of the houses of the poor.
6. Building laws to assure free ventilation.
7. Public gardens.
8. Public baths.¹⁰

During the first half of the new century there was an extraordinary activity among municipal corporations and boards of Commissioners to obtain new statutory powers to improve the sanitary conditions of their towns; between 1800 and 1845 nearly 400 Improvement Acts of one sort and another were obtained,

¹ 20 Geo. III, c. 21.

² 4 Geo. IV, c. lxix.

³ *Op. cit.* II, cxiv.

⁴ *A Concise History of Worcester* (1808), by W. R., p. 30.

⁵ August 1828, p. 58.

⁶ 1829, p. 72.

⁷ E.g. Rowland Mainwaring, *Annals of Bath* (1838).

⁸ *Royal Commission on Metropolitan Sewage* (1884), p. xi.

⁹ *Op. cit.* p. 154.

¹⁰ *Op. cit.* p. 188.

many of them containing sanitary regulations.¹ New and remarkable powers were obtained by many towns. Smoke abatement clauses began, apparently with the Birmingham Act of 1812,² and the Belfast Act of 1816;³ other towns were quick to follow their example. Sanitary improvements of all sorts were inaugurated, and a study of the Local Acts of the period just before the national legislation of 1848 shows that many towns were very active in the matter; among the provisions of these Acts were

The prohibition of the building of new houses without drains, which had to be approved by the Local Authority (e.g. St Helens, 1845; Chester, 1845; Burnley, 1846; Wallasey, 1845).

Power for the Local Authority to order the owners of the existing houses to provide drains connecting with the main sewer (e.g. Southport, 1846; Manchester, 1845; Northampton, 1843; Glasgow, 1843; Exeter, 1832).

The prohibition of building houses without privies (e.g. Newcastle upon Tyne, 1846; Burnley, 1846).

Provision of public lavatories (e.g. Chester, 1845; Gorbals, 1843; Southport, 1846; Northampton, 1843).

Prohibition of the letting as dwellings of cellars in courts, or of any cellar of less than a specified height and window area (e.g. Southport, 1846; Wallasey, 1845; Liverpool, 1842).

Provision of public baths and washhouses (e.g. Liverpool, 1842; Glasgow, 1843).

The appointment of Sanitary Inspectors (e.g. Southport, 1846; Burnley, 1846; Manchester, 1845).

Prohibition of building houses in close courts (e.g. Manchester, 1845).

Prohibition of building houses except with at least one room of at least 108 superficial feet (e.g. Wallasey, 1845; Liverpool, 1842).

Minimum height of rooms in new houses 8 feet (e.g. Wallasey, 1845; Belfast, 1845; Liverpool, 1842).

Power to order the cleansing and whitewashing of the houses of the poor (e.g. Chester, 1845; Newcastle upon Tyne, 1846).

Inspection and licensing of lodging houses (e.g. Gorbals, 1843; Manchester, 1845; Southport, 1846).

Provision of public gardens and recreation grounds (e.g. Leicester, 1846; Chester, 1845).

Provision of public drying-ground for clothes (e.g. Chester, 1845).

This list shows only some of the powers which were being sought and obtained by the more enterprising local authorities in this period.

The procedure for obtaining these Acts was slow, and very expensive. The majority of the clauses which local authorities included in their Bills were standard provisions, but yet each clause had to be proved to the satisfaction of Parliament. It was to obviate some part of this expense and to save the time of Parliament that in 1847 there was passed the Towns Improvement Clauses Act. Here were collected all those clauses which were normally included in such Bills, and simple machinery was provided for their automatic inclusion in Local Acts. The more remarkable and uncommon of these clauses were not included.⁴

In the same session a Bill was introduced by Lord Morpeth with the aim of establishing local sanitary authorities in areas where there was not already a municipal council available for the purpose.⁵ These authorities would be

¹ See F. Clifford, *The History of Private Bill Legislation* (1885-7), II, 291.

² 52 Geo. III, c. cxiii.

³ 56 Geo. III, c. lvii.

⁴ E.g. the provisions about the size of rooms.

⁵ An abortive Bill on the same lines had been introduced by Lord Lincoln in 1845.

invested with the powers contained in the Towns Improvement Clauses Act, and additional powers relating to smoke abatement, water supply and other services. In all cases, however, their proposed powers were those which had already been obtained and proved by local authorities in various parts of England.

The Bill was withdrawn, partly because objection was taken to the system of legislation by reference to another statute; accordingly Lord Morpeth introduced a new Bill in the following year. The powers of the proposed local sanitary authorities were set out in full in the Bill itself. This became the Public Health Act, 1848. Like the earlier Bill it was composed essentially of a collection of clauses from the Local Acts of the previous years. The only important innovation was the establishment of a powerful central authority. In this respect the Act repeated the pattern of the Poor Law Amendment Act of 1834, which was similarly based on the practical experience of the more energetic local authorities.

This is but an outline of the relevant facts. Much research remains to be done. A general account is needed of the part that Local Acts have played in shaping the social services of England. Too little attention has been paid in the past to the initiative which came from the provincial towns, and showed itself in local legislation. Here no more has been attempted than to draw attention to the neglected importance of Dr Percival and his colleagues in the eighteenth century and of the local Improvement Acts of the early nineteenth century, as factors in the shaping of national legislation.

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REVISIONS IN ECONOMIC HISTORY

XV. THE TRIBAL SYSTEM IN WALES

By TIMOTHY LEWIS

IT is now seventy years since Dr F. Seebohm thrilled students of economic history with his *English Village Community*. Chapters vi and vii of that book are devoted to the 'Tribal System' of Wales, Ireland and Scotland, and they are based upon the laws of Wales and of Ireland. In 1895 he extended this part of his studies and devoted a whole volume to the study of the *Tribal System in Wales*.¹ Dr Seebohm was in search of material to enable him to trace his village communities as far back as possible. Students were then wont to speak of the 'clans' of Ireland and the 'tribes' of Wales as survivals of a very primitive state of society, and Sir John Rhys had declared his opinion that these 'tribes' of North Wales were traceable to the earliest appearance of the Britons in the land. By reading English translations of the *Laws of Wales*, Dr Seebohm found much material which reflected the daily life of what appeared to be a very primitive community which held its land in common and practised co-tillage. There was even an officer bearing the very primitive name of 'cow-dung major' whose duty was to superintend this co-tillage and division of labour; and, most primitive of all, there was the tribal bed in which slept four generations together. Having made his framework for Celtic society from his *gwely* and *gavel* he made the remainder fit into this frame and the result appears to be a very primitive community having land in common and living in his tribal house where four generations had only one bed to which they went 'in order of seniority'. In 1895 Professor Meitzen published a plan of this hypothetical Celtic house, and it has been accepted confidently by some writers.

As far as I know the technical terms of these Celtic documents have never been properly examined: perhaps one could hardly expect them to be examined, and that for several reasons. Dr Seebohm depended for his Celtic upon Sir John Rhys, as he says in his Preface to the first edition. Sir John, in turn,² says that the greater part of Chapter ix (of his book *The Welsh People*) on the 'History of Land Tenure in Wales' where the Tribal System with its institutions are discussed 'was written by Mr Frederic Seebohm, LL.D. . . .'³—and describes it as a valuable contribution to economic history. That assured students that the Celtic documents and the use made of them by Dr Seebohm had the warrant of the highest authority on the subject.

In addition, Dr Seebohm was following here in the footsteps of earlier workers. In 1723 Dr William Wotton published an account of the MS. of the *Record of Carnarvon* in a learned but short-lived periodical.⁴ Dr Wotton on pp. 20-1 discusses the *Wle* and *Gavel* of this *Record*, i.e. the chief technical terms of Dr Seebohm's 'Tribal System', and he says of them that the *Weles*, i.e. 'beds' were so-called 'because in or upon them they [i.e. owners] were to rest'. These owners, he says, comprised brothers, cousins-germans, and second cousins. In 1730 William Clark, Wotton's son-in-law, published Wotton's edition of the

¹ F. Seebohm, *Tribal System in Wales* (2nd ed. 1904).

² J. Rhys and D. B. Jones, *The Welsh People* (1900).

³ *Report of Royal Commission on Land in Wales, 1894-6*.

⁴ *Bibliotheka Literaria* (1723).

*Laws of Wales*¹ with Latin translations and a Glossary by Moses Williams, one of the ablest Welsh scholars of the time. On p. 573 this Glossary says

Gwely, lectus: metaphorically *familia*, *domus*. A family or Household. Probably denoting father, mother, brothers and sister of a homicide. As the Latin *domus* is used for the people dwelling there.

Sir H. Ellis, in his edition of the *Record of Carnarvon*² adopts the same view about the meaning of *Wele* in the *Record*. So the *Wele* and *Gavel* of Dr Seebohm's 'Tribal System' had the warrant of the highest contemporary authorities. A few students questioned some of Dr Seebohm's conclusions, but I know of no one who challenged his use of the above Celtic technical terms.

It has been pointed out several times that Dr Seebohm's 'Tribal System' rests mainly on his interpretation of the two technical terms *gwely* and *gavel*, two terms which figure largely in these *Records*, but sparingly in the *Codes*, and if his use of them is right and just, then the integrity of his conclusions cannot well be challenged. We want to examine these terms here. Dr Seebohm based his studies chiefly on the *Record of Denbigh* of 1334;³ *Extents of Anglesey* of 1294-1351; and the *Record of Carnarvon* 1335.⁴ Denbigh was erected a borough by Henry de Lacy, Earl of Lincoln, in 1290, and it was thus an alien outpost in a lately conquered and hostile country; and the other documents are of a similar nature. The Denbigh *Record* was compiled by Hugh de Becele for de Lacy, and he was an alien here also.⁵

In these *Records* and *Extents* we meet frequently the expression *wely wyrion*, or *wirion*, or *wiryon* or *weirion*, and Dr Seebohm, like his predecessors, adopted the *wyrion* form, and this was not unnaturally interpreted as 'grandsons', and thus the whole expression *wely wyrion* was taken to mean 'bed of grandsons'. In his Introductory Note, pp. vi-vii, Dr Seebohm says:

The Welsh *Extents* disclose to us a family group, limited to the descendants of a great-grandfather, holding together the family share in tribal rights and occupation of land as a united body, still generally under the name of the great-grandfather as chief or head of the *gwely* although he may long have been dead.

It is not too much to say that a definite conception of the *gwely* as the unit of a tribal holding is as essential to the understanding of Welsh tribal custom as was that of the virgate or yardland to the understanding of the English community under the open-field husbandry of the manorial system.

In fourteenth-sixteenth-century Welsh documents there are any number of references to this institution of *gwely*, and Dr Seebohm describes this *gwely* as it appeared to him in twelfth-century documents thus:

We have seen that even in the twelfth century the household all used one couch extending round the wall of the single room of the house; this couch was called the *gwely*. The *tir gwelyaeg* was thus the land of the family using the same couch; and the descendants of one ancestor living together were a *gweli-gordd*. As late as the fourteenth century, in the *Record of Carnarvon*, the holdings are still called *Weles* and *Gavells*.⁶

¹ W. Wotton, *Cyfreithieu H. Dda seu Leges Wallicae* (1730).

² *The Record of Carnarvon*, Harl. MS. 696, ed. H. Ellis (Record Commission, 1838).

³ *Extenta Castri et Honoris de Denbiegh facta per Hugonem de Beckle*, ed. P. Vinogradoff and F. Morgan as *Survey of Denbigh* for British Academy, 1914.

⁴ *Extents of Anglesey* from Pub. Rec. Office, published in Appendix to Seebohm's *Tribal System in Wales*.

⁵ *Codes*, i.e. *The Ancient Laws of Wales*, Record Series, ed. Aneurin Owen (1841).

⁶ F. Seebohm, *English Village Community* (4th ed. 1915), p. 194.

He describes in much detail the tribal house as he saw it in the writings of Giraldus Cambrensis, and in the *Laws of Wales*, but his picture is really a composite picture from Gerald, the *Laws* and the old English hall. The tribal house was built of newly cut trees from the forest, and the long roof-tree was held up by *gavaels* 'forks', and these formed aisles and 'all along the aisles, behind the pillars (i.e. *gavaels*), are placed beds of rushes, called *gwelys* (*lecti*), on which the inmates sleep'. And so in after-times, long after the tribal life was broken up, the original holdings of an ancient tribesman became divided in the hands of his descendants into *gavells* and *gwelys*, or *weles*. Thus the *gavel* or 'fork' which supported the old roof-tree became what he and others called, and still call, 'holding' of land, and the bed of rushes between the *gavells* and the sides of the house was called *gwely* or unit of the Welsh tribal system.

Our thesis is, in brief, that the *gwely* of these *Records* never meant 'bed' at all, though it is translated *lectus* in these late documents, but that it was the common word for 'blood', and was used metaphorically for 'kinship' just as 'blood' was in English, and *sanguis* in Latin documents. Further the *wyryon* which he translated 'grandsons' is not the plural of *wyr* grandson at all, but that the proper form is *wiryon* which is an adjective meaning 'true', 'innocent', 'lawful', etc. Literally then, *gwely wyryon*, or *wiryon*, means 'true blood', or 'complete blood', and not 'grandsons' bed'. Likewise *gavel* was taken to be the 'fork' holding the roof-tree but used metaphorically for 'holding' instead of *gafel* 'tax', 'tribute'. We want, therefore, to re-examine these technical terms.

It was Sir J. E. Lloyd¹ who gave the briefest and most striking definition of the 'patriarchal bed' as, 'the "circle" or "ring" of ancestors consisting of four generations who dwelt together in the common house, and sat by day and slept by night in order of seniority'. According to the old laws of Wales, inheritance was divided according to what is known as 'gavelkind'; and as Dr Wotton saw, a man's heirs collectively under this system were brothers, cousins-germans and second cousins. Our *Laws* know nothing of this 'four-generation bed', or 'bed of grandsons', and it would seem very strange to find that the property of a grandfather was called *treftad* (i.e. patrimony) but that his bed was called the 'bed of his grandsons', though his 'grandsons' were not counted as his heirs at all under the system when the *gwely* was treated as the chief unit of society. In my *Glossary*² s.v. *gwely*, p. 172, I suggested that there were two words *gwely* which had a common form but not connected in origin, meaning, or history. That *Glossary* was based upon the oldest Welsh manuscript of the Laws of King Howel the Good.³ Since then I have copied the oldest Latin MSS.⁴ of these Laws and have made complete glossaries to them as well as to my transcripts of the other Welsh recensions of these Laws. I am convinced now that that suggestion in the 1913 *Glossary* about *gwely* was sound, and for the following reasons among many others.

In that oldest Welsh text the word *gwely* 'bed' occurs ten times, and in each of the ten instances it means 'bed' and nothing else, and it is never used metaphorically for anything. There is another *gwely* there which is used as a technical word for a 'wound that bled', and for something corresponding to what is known as 'wergild group', that is, those relatives who paid or received the blood

¹ H. Lewis, *Ancient Laws of Wales*, ed. J. E. Lloyd (1892), editorial note, p. 101.

² T. Lewis, *Glossary of Medieval Welsh Law* (Manchester, 1914).

³ *Black Book of Chirk*, Peniarth MS. 29, c. 1200 (Facs. J. G. Evans, 1909; text, *Zeit. f. celt. Phil.*

1933).

⁴ Peniarth MS. 28; last quarter of twelfth cent. Nat. Library of Wales, and *Codex Vespasian*, E. xi, Brit. Mus.

fine in case of homicide. I suggested in 1913 that this *gwely* 'bloody wound' and 'blood fine' were the same word, and that it meant 'blood' generally at first, but that it came to be used metaphorically for 'kinsmen', within a certain degree of relationship. This *gwely* is cognate with the Irish word *fuil*, and *fuil* was used in Irish legal documents just as *gwely* was used in Welsh documents, or *sanguis* in Latin documents. Dr Whitley Stokes¹ explained that Welsh *gwely* was of the same origin and meaning as the Cornish *goly*, and the Breton *gouly*, and that they were all cognate with the Latin *vulnus*. He explains that they mean *plaga*; they do, but as Grimm² says: 'Der streich oder schlag heisst *plaga*, *colpus*... geht blut danach, so wird auch wohl *plaga* (franz. *playe*) gebraucht'. The old magic formula *quinque plaga medicina mea*, referring to the five 'bloody wounds' of Christ, was found in Welsh as *pum weli*, and everybody knew that it meant not 'five beds', but 'five wounds'. This same *gweli* is used in the Welsh Bible to translate *cui sine causa vulnera* of the Vulgate, and the same *gweliau* is used to translate *plaga* of Isai. Von Wilda³ has a long discussion about the different kinds of wounds, and a tariff of the fines imposed for inflicting them as he found then in the old laws of Western Europe. The Welsh *gwely* and its cognate Irish *fuil* are clearly a part of this early custom. In modern Welsh the word for 'bed' is written *gwely* and the word for 'blood' is written *gweli*, but that is a modern distinction. Professor Thurneysen, who was responsible for the Celtic in Walde,⁴ discussed this *gwely*-*fuil* Celtic word under the Latin *vulnus*, and treated them as all cognates, and so does Dr Pedersen,⁵ and they all agree about the philology of the words, and that the original meaning of the series was 'blood'. In the *Corpus Juris sanguis* is said to mean *Blut, Leben, Verwandtschaft, Herkunft* and *Abkömmling*.

The late *Records* quoted by Dr Seebohm translate *gwely* by *lectum*. *Lectum* is found twenty-one times in the two oldest Latin MSS. of Welsh Laws, but the word is never used for anything but for the article of furniture, and never for kin or *gwely*, and they are much older than the *Records*. These Latin Laws give detailed information about the 'wergild group' and degrees of kindred, but they never call them *lectus* or *gwely*. The Latin names here are *parentela*, *gentes*, *generatio*, and where the oldest Welsh recension⁶ uses *gwely* for the 'wergild group' the two oldest Latin recensions⁷ say *gens* or *gentes usque ad septem generationem*. Dr Seebohm uses often the technical term *gweligordd* for the 'stock of co-relatives' or the issue of his *lectus*; but the oldest Latin MS. says here *per parentelam* i.e. *hach ac edryf*, and that was the usual expression for 'descent' by blood relationship. This word *gweligordd* is a hybrid term made up of *gweli* 'blood' and *cordd* a word borrowed from the Latin *cohort*, and this *cordd* is just like the *cohort* of King Alfred's *Laws*, and of Ine's *Laws* where it is a gloss on the Anglo-Saxon *hlod* (a band). Mr Hubert Lewis⁸—defines this *gwelycordd* as 'the enclosure used for the family stock or circle'. Dr Seebohm lays stress also on the expression *tir welyog*, but there is no mystery about that term either, for we

¹ W. Stokes, *Urkeltischer Sprachschatz* (Göttingen, 1894).

² J. Grimm, *Deutsche Rechtsaltertümer* (4th ed.; Leipzig, 1922).

³ W. E. Wilda, *Das Strafrecht der Germanen* (Halle, 1842).

⁴ A. Walde, *Latein-Etymologisches Wörterbuch* (Heidelberg, 1910).

⁵ H. Pedersen, *Vergleichende Gramm. der Kelt. Sprachen* (Göttingen, 1909, 1913).

⁶ *Black Book of Chirk*, Peniarth MS. 29, c. 1200 (Facs. J. G. Evans, 1909; text, *Zeit. f. celt. Phil.* 1933).

⁷ Peniarth MS. 28; last quarter of twelfth cent. Nat. Library. of Wales; and *Codex Vespasian*, E. xi, Brit. Mus.

⁸ H. Lewis, *Ancient Laws of Wales* (1892), p. 101.

find Welsh poets of a later age singing about the *crog welyog*, i.e. about the 'bloody' cross of Christ, and it never had anything to do with *gwely* (bed).

Further, there is a kind of collective noun based upon the *gwely* of the *Records* which is still in everyday use, that is *gwehelyth*. It has a variety of meanings now: family, tribe, nobility, but it was in some of its forms used for 'royalty', 'princes', etc., people of royal or unblemished blood, and when all the many forms of this word are put side by side, it becomes clear that it means something like 'bloodship', or 'people of the best blood'.

What seems to have happened is that Hugh de Becele, who compiled the *Denbigh Record*, and the other alien scribes had found the word *gwely* in common use as a technical term, and that they had asked some native what this *gwely* meant. *Gwely* is still in use in *rhed-weli* (artery or vein), and in Biblical language for 'wounds', but as a common word for 'blood' it had been supplanted long ago by *gwaed*, and the only answer a Welshman could give was that *gwely* meant 'bed'. In the eighth or ninth century *Codex Ambrosianus*,¹ *consanguineis* is glossed twice in Irish by *confulidib*, i.e. a dative plural of *fulide* 'cruentus', a derivative of the above *fuil*. So the idea of the Celtic *gwely-fuil* 'blood', 'blood-kin' is old enough and well-established; and there is no mystery about it or about its use from that early time down to this day. The usual words in Irish for 'bed' are *lepad* and *lige*, but I have failed to find any evidence that either of them was used at any time as Dr Seebohm used *gwely*.

But even if it be granted that *gwely* meant 'blood' and not 'bed' in the earliest of these Welsh legal documents, that seems to be of no avail, for it seems to create a new and formidable difficulty. We saw that Dr Seebohm relied chiefly, not on *gwely* but on *gwely wryron*, and the 'blood' of grandsons as the name of a social unit is more difficult to explain than even the 'bed of grandsons'. It seems to reverse the course of nature still more violently. Here again something similar to the initial mistake has taken place. As we saw, the word *wryron* was written in various ways, and some of the forms were the same as the form of a different word. All writers who have dealt with this expression have assumed that *wryron* was the proper form and not *wiryon*, and they then assumed that the word meant 'grandsons'. If it had been noticed that *gwir* 'true', 'truth' was written also, in its mutated form, *wyr*, and *gwirion* 'innocent', 'pure', etc., was written *wryron*, etc., they would never have fallen for the idea that Welsh society was based upon the 'bed of grandsons', for they would have seen that the whole expression *gwely wryron*, or *wiryon* meant 'true blood', or 'pure blood'. *Gwir* 'true' is written *gywr* in our oldest Welsh law book, and there can be no doubt about the meaning; likewise Cain's brother, Abel, is called *Abel Wryron*,² and the 'true Cross' is called *Y Wyr Groes* in the fourteenth century.

Dr Seebohm went to much trouble to fit some of the families named in the *Record of Denbigh* into his interpretation of this *wele wiryon*: thus he arranges 'Wele Rand Vaghan ap Asser', which he says is 'described as the *priodarii* holding the original *lectum* called *Wele Wyrion Rand*, i.e. the *Wele* "bed" of the grandsons of Rand'. The student will find the text on which this was based in the text given fully by Vinogradoff.³ It will be noticed that *Wele Rand* (not *Wele Wryron Rand*) is divided into four *Weles* of the four sons of Rand; and that these four *Weles* in turn, are divided into twelve *gavells* held by the twelve grandsons of Rand, but these are not called, as one would expect, the *gavells* of 'wryron Rand'. It is

¹ G. I. Ascoli, *Il codice Irlandese dell' Ambrosiana, Glossarium Palaeohibernicum* (1878).

² R. Williams and G. H. Jones, *Selections from Hengwrt MSS.* (1892).

³ *Survey of Denbigh*, pp. 156-7.

clear that this inheritance was held by members of 'Wele Rand'. Dr Seeböhm had this MS. which was later published under the editorship of Dr Vinogradoff, and in this edition the terms *wele wirion*, *propars wiryon*, etc., are written on the margins sometimes though not often; and where they are written it seems clear that they do not mean 'grandsons' at all. Thus on p. 301, *Propars Wiryon ap Edred*, there are four *Weles*, and they are described in detail: 'Wele Rees ap Edred', the first, is divided among sixteen persons, who, to judge from their names are not related to either Rees or Edred though the margin says *Propars Wiryon ap Edred*. The same seems true of the other sons of this Edred, and the *wiryon* seems to apply to Edred and not to the grandsons at all, and it seems to be explained by these words at the end of the section: *Et nullum est escaeta in isto Wele*. Parts of the other *Weles* are described thus: *Et cetera pars et tricesima pars istius Wele sunt escaeta domini*. It was the *Wele wiryon* of Rees ap Edred—the true property of Rees, while the others had part of their land escheated to the king, and was not therefore 'wiryon' at all.

Likewise, in the margin of p. 302 there is *Propars Wiryon Gougou*, where the land is divided among the sons of Gougou, and this Gougou ap Idnerth had five sons but they are not called *Wiryon Idnerth*, for the margin calls it *Propars Wiryon Gougou*. The *Weles* are held by men, who to judge from their names, are not related to either Gougou or Idnerth, and so the *Wiryon Gougou* seems to mean that it was the true property of Gougou, and that none of it had been escheated. The same explanation applies to the *Propars Wiryon Doyok* of the margin of p. 303. Doyok, son of Elidyr, had four sons whose *Weles* are described, but the margin has *wiryon Doyok* whereas they were the grandsons of Elidyr; and, in addition, the *Weles* are held by different people. On the margin of p. 261 is written *Wele Wyrion Barth*, and three unrelated persons hold one half of this *Wele Wyrion*, but the other half is escheated and is not called *Wele wyrion*. In the Villata de Thlessalet of p. 205 the margin says: *gavella wyrion Edden Vaghan*, and it says that it is held by three persons who are the great-grandsons of Edden, but it adds that they: *tenent alteram gavellam integram que continet medietatem istius ville*. The other part of this villata is said to be held by *Gronow ap Mereduth et parcenarii sui*. . . *tenent tres partes .i. gavelle que dum fuit integra continebat medietatem istius ville*. . . *Et quarta pars istius gavelle est escaeta domini*.

I think it is clear now that the *Record* is not describing any *wyrion* 'grandsons', but as it is written several times, *wiryon* 'true property' of the person named, and that it had not been alienated. It is put in another way on p. 80 where it is said: *Villata de Astret Canon que dum fuit integra in manibus progeniei Canon* where *integra* expresses exactly the meaning of *wiryon*. In medieval Welsh documents *gwely* was gradually supplanted by *gwaed*, which became the common word for 'blood', and *gwely wiryon* is no longer in use; but the corresponding *gwaed gwirion* is quite well known to anyone acquainted with the Welsh Bible. It is best known, probably, from Judas's outburst after his betrayal of Christ when he said: *peccavi tradens sanguinem justum* which is translated in Welsh *gwaed gwirion*.¹ This Welsh expression occurs several times in the Old Testament and the Apocrypha as a translation of *sanguinem innocentem*.²

In the Extent of the lands of the Bishop of St David's,³ *gwely* is found often in describing the lands of *liberi tenentes*; and on p. 200 we find: *Item dicunt quod sunt ibidem viii lecti qui vocantur gwely et omnes predicti tenent per tenuram antiquam videlicet Ach ac edridd*. (It occurs also as *vocantur vulgo gwele*.) This is the first instance of

¹ Matt. xxvii. 4.

² Isa. lix. 7; Joel iii. 19.

³ *Black Book of St Davids* 1328, ed. J. W. Willis Bund (Cymmrod. Record Series, 1902).

the use of *gwely* in this Extent, and it is defined once and for all as *Ach ac edridd*. Dr Seebohm translates the expression 'by kin and descent', and Dr Willis Bund adopts that. In the Welsh laws, where land is claimed by this title, the owner of the land is *priodawr* and he must satisfy the court that his descent is beyond dispute and his blood untainted with bastardy: that is, he must be *gwely wirion* in the sense the *Record of Denbigh* uses the expression. In the St David's Extent *Gwely Oyron* occurs a few times, and the editor prints it as a proper name, and there is no suggestion of 'grandsons' in the context at all, but it is clearly the same expression as *gwely wiryon*.

In the *Records* the word *gavel* is used often in combination with *gwely*, and *gwely* seems at times to be divided into so many *gavells*, and Dr Seebohm says on p. 33:

In cases where the parent was alive the sub-shares of children (of the *wele*), according to the custom of gavelkind, were apparently not called *weles*, but *gavells*. At least, this is what the use of the terms seems to suggest as their meaning.

Thus, when we read that the villata of so-and-so consists of so many *weles*, the meaning seems to be, not that the land of the villata is divided into so many sections or estates, but that it is occupied by so many kindreds, or family groups. And when we read that the *wele* of so-and-so consists, or consisted when it was held *integre*, of so many *gavells*, we are to understand that it embraced so many subordinate families or sub-households of descendants.

This word *gavel* has caused quite as much difficulty as the *gwele*, and it is still causing much misunderstanding. We saw that some *gavells* were held by people whose names bore no resemblance to the name of the stock or *gwele* who owned the land. According to the *Chirk Codex* (c. 1200) *gavael* meant either (a) a fork for supporting the roof-tree of a house, or (b) one-fourth part of a *tref* of four *randyrs* or 'sharelands' of sixteen acres each. It seems odd that the shares of the sons should be known as *gavella* and the shares of the grandsons be called collectively as *gwely* if Dr Seebohm's interpretation is right. The *gavel* or *randyr* is defined in the oldest Latin recension of the Welsh Laws¹ as *census terre qui dicitur rantyr*. It would be strange if the whole country were reticulated into little sections of sixteen acres for the purpose of tribal farming. The *randyr* paid 'daeret money', and *daeret*, or *taeret* is borrowed from the English 'target', i.e. 'shield', and meant 'shield money' or 'scutage'; and *gavel* was thus a geld unit for the purposes of taxation or rent, and had nothing to do with the division of tribal stock or inheritance. A person who held a *gavel* came to be called *gauylaugur*, i.e. *gavel* man, and where this man is described as *gauylaugur* in the *Vespasian Codex*, the oldest Latin text calls him *exul* to whom the king had given land. It has been assumed that *gavel* was the same word as the *gavel* 'fork', and that it meant 'holding'; but it turns out to be a late word borrowed from the Anglo-Saxon *gafel*, or from the latinized form *gablum* which meant a 'tax'. This *gavel* occurs reasonably often in our law texts, and it is found several times joined with the word *mach* 'pignus' or surety. In an early twelfth-century document called the *Privilegium Sancti Teliaui* of Llandaf,² some land was given which is described by *dyluyd*, *dyuuner*, *digauayl*, i.e. the land was to be free from hosting, from dues to a lord and free from *gauayl*. George Owen, Lord of Kemes, North Pembrokeshire (1552-1613) describes what he calls *gabellum* as he knew it in Kemes:³

You shall also finde in diverse ancient deedes this word gabellum, or in gabello, and sometimes gabularij: this word gabellum, which I never sawe nor

¹ Peniarth MS. 28; last quarter of twelfth cent. Nat. Library of Wales; and *Codex Vespasian* E. xi. Brit. Mus.

² *Liber Landavensis, Book of Llandav*, ed. J. G. Evans and J. Rhys (Oxford, 1893).

³ *Description of Pembrokeshire*, ed. H. Owen (Cymmrod. Record Series, 1892).

read in anie writings or surveys (saving those concerninge lands in Pembroke-shire), signifieth the estate of the tenante that holdeth the land, to be eyther at will for yeares, or for life, payeing rent for the same, and not of land holden in fee simple, or fee tayle; for in manie deedes you shall finde, *quam quidem terram J.P. tenet in gabello*, that is as much to saie, as J.P. is tenant in the land, and that he holdeth the same for yeares or life, payeing rent, and you shall allso finde in manie antient Rentrools, and surveyes this difference in the rentes, as *Redditus liberorum tenentium, et redditus gabulariorum tenentium*, the one beinge chiefe rent, as yt is vsuallie called, paid by freeholders or those that have state of inheritance, the other is ment rent of all tenants, that hold of the manor at will or by lease, for life, or yeares, and this amonge the comon people of this countrey, ys yet vsuallie called gael rent and such tenauntes gael tenants.

In the Kemeys Charter of Nicholas Fitz Martin of 1278¹ it is said:

All the freemen of Kemeis—English or Welsh—and Nicholas Fitz Martin agree to grant to Nicholas on behalf of themselves and their heirs that the men called *gabularii* with whatever they have for sale viz. for which toll has to be paid, can buy and sell without toll outside the market but they pay toll within the market.

The *gabularii* or *gale tenauntes* were tenants who 'had not an estate of inheritance', and *gael*, *gabularii* like the *gavel* of Dr Seebohm's *Records* was the Anglo-Saxon *gafel*, *gaful*, or the latinized *gabulum* all meaning a 'tax' of some kind, and the word is not related in any way with the Welsh *gafael* a 'fork' or a 'hold', though that seems to be still the official teaching on the subject. Professor T. Jones Pierce, in a paper on the *Gafael* says²: 'Throughout this paper it has been taken for granted that the *gafael* like the *gwely*, was the united holding of a single stock or clan...', but 'the *gwely* had a larger territorial basis'.

In a Foreword to a book on the *Lordship of Oswestry*³ also, Professor Jones Pierce says of the *gwely* 'which reduced to the simplest terms, was a holding of arable land jointly possessed by the members of a clan'. He goes still further and says that in the twelfth and thirteenth centuries 'the semi-nomadic conditions of living, which had for hundreds of years dominated the existence of Welsh freemen, gave way... to a more stable and settled agrarian organisation'.

When one accepts Dr Seebohm's interpretation, and the modifications made by some later workers who had adopted the main thesis, it follows that communal land, cattle, and working teams appear as marks of the semi-nomadic life in twelfth-century Wales.

One word more. The Latin word *firma*, or the corresponding English word *feorme*, was borrowed in the oldest Welsh recension of the Laws as *fferem*, and it meant 'a mess of food', just as *feorme* meant once. The usual word for 'mess of food' was *anrec*, now meaning 'gift', but it corresponds to the Irish *eric* 'wergild money'. But *firma* was also translated, as well as borrowed, as *cadarn* 'strong', 'firm', and one finds it joined to *gavel* as *gavella cadarn*, and there is even *Wele Catharn* in Anglesey, *tir cadarn* in Gower, *Maes Cadarn* in Bala, *Beili Cadarn* in Llandyssul, and there are many such names with territorial implications. *Gavel cadarn* seems to be as near as possible a literal translation of *feudi firma*, which was a kind of tenure subject to perpetual fixed rent but without any other services.

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¹ *Baronia de Kemeys* (Cambrian Arch. Assoc. 1861).

² T. Jones Pierce, *The Gafael in Bangor MS. 1939* (Trans. Hon. Soc. Cymmrod. 1942).

³ *Lordship of Oswestry 1393-1607*, ed. W. J. Slack (Shropshire Arch. Soc. 1951).

ESSAYS IN BIBLIOGRAPHY AND CRITICISM

XXVI. THE BRITISH ECONOMY

By W. W. ROSTOW

I

THIS volume¹ was assembled for a particular clear-cut purpose; namely, to provide students with materials adequate to form a coherent view of the evolution of the British economy over the five years which followed the end of the war. In terms of that purpose, the effort has been successful. Books written in committee are rarely satisfactory. This one has some nineteen authors; and it bears the marks of such a collaborative effort. Nevertheless, it ranks high in its special category. Despite some inconsistencies, gaps, and overlaps, a roughly common framework of analysis informs it. The book will be found useful well beyond the circle of Oxford students for whom it was primarily organized.

The setting in which this book was produced contributed to its virtues. First, there has been an extraordinary body of statistical material and of piecemeal analysis produced in recent years on aspects of the British economy. These consist not only of Government papers and various international documents (notably those of the Research Division of the Economic Commission for Europe), but also of studies by individuals. For example, the work of Rostas, of Leak and Maizels, and of many of those who have contributed chapters to this study, as well as the flow of knowledgeable articles in *The Economist* and other current periodicals, provide a groundwork for analysis which is reasonably solid. Historians come to expect of almost any period they examine a high standard of contemporary shrewdness and knowledgeability, qualities which (contrary to the conventional expectation) are often diluted with the passage of time. The world's economic problems since 1945 have attracted much first rate thought; and one of the virtues of this volume is that it makes accessible in one place the fruits of many partial analyses.

Second, the accumulated short-run experience of the British economy since 1945 is now susceptible of a more shapely analysis than, perhaps, at any earlier time. Although, as considered later in this review, the perspective of the authors is in no sense to be regarded as final, they, nevertheless, are examining a substantial enough experience to sort out the persistent determinants of Britain's position. The weighing of past experience in perspective is, certainly, prerequisite to the making of intelligent policy; and, aside from its pedagogical function, this book may well serve to give to a wider audience a sharpened sense of the experience through which the British economy has passed since 1945, and of the underlying problems which await solution.

Third, although this volume has a distinct political tone, it succeeds, on the whole, in posing with a respectable objectivity the issues of political and social

¹ G. D. N. Worswick and P. H. Ady (ed.), *The British Economy, 1945-1950* (Oxford University Press. 1952. Pp. 621. 35s.)

choice which Britain has faced and will continue to face. By and large, I would suppose, the authors fall, in the British spectrum, a little left of centre, if any substance is still to be accorded that means of designation. They are, on the whole, proud of but not complacent about Britain's total post-war economic performance; they are inclined to feel that the full employment policy of the Labour Government was right; or, more precisely, that a tough disinflationary policy would have created problems at least as difficult of solution as the problems created by the somewhat looser monetary framework in which British recovery has proceeded; and, finally, they believe that Britain was justified in maintaining the range of direct controls over its foreign balance which have obtained (since the summer of 1947 at least) and in not committing itself more freely to a world of automatic adjustments. Echoes of the irritated debate on these matters which has proceeded steadily since 1945 are to be heard in the course of this book. On the whole, however, the issues are stated with as high a degree of objectivity as one might expect on an occasion this close to events.

The degree of contention varies, of course, from chapter to chapter. Although statesmanlike by the standard of other occasions, Mr Balogh is a bit more of a tractarian than some of his colleagues. On the other hand, Mr Wilson notes that the policy of the miners towards the introduction of foreign labour was 'one of the worst examples of restrictive practices during the quinquennium' (p. 250); Mr Briggs's analysis of the social services poses searching questions about the operation of the welfare state. On the whole, the authors do not avoid criticism of British policy where, as economists with the benefit of hindsight, they believe such criticism is justified. This is not a Labour Party tract. One can easily envisage a quite different review of British post-war policy written by other British economists. There are, nevertheless, advantages in having an account written by observers who largely share the perspective of those who were forced to make decisions at the time but who now contemplate in relative tranquillity what in fact has happened.

Fourth, British economists in general have been remarkably close to the flow of economic events and even to the process whereby policy decisions have been made. A near professional knowledgeability concerning the form in which issues have actually arisen for decision is no new thing in the history of British political economy. To a remarkable extent, however, the present generation of economists in Britain and elsewhere, have, out of the war and post-war experience, acquired a rare acquaintance with the enormously complex setting in which policy decisions have had to be made. To some extent this has its costs. As will appear, the intellectual perspective in which the British economy is viewed is, by older academic standards in the social sciences, rather narrow. There is little grand sweep here; and one sometimes wishes the authors were a bit further from the civil servant. Nevertheless, by and large, they know what they are talking about.

II

As one would expect, the quality and interest of the individual contributions vary. They vary, in part, in accordance with the quality of the theoretical tools which modern economics has developed and, in part, with the quality of the data which are available. These two are related. We have adequate statistics in foreign trade because, long ago, governments and economists interested themselves in the political economy of foreign trade; and, in response to urgent needs and clear conceptions, the data were organized. Similarly, we now have

reasonably accurate national income data broken down by categories convenient for short-period analysis of some subtlety. Modern tax systems produce data which permit refined discussions of income distribution. On the other hand, we lack adequate data on the pattern of investment outlays. We are only just beginning to produce useful statistics on productivity; and if one proceeds beyond certain over-all productivity indexes for industries, we are soon lost. We have no measures, for example, of the degree to which the quality of entrepreneurship and monopoly influences affect the gap between the potential productivity of particular industries (given the state of innovations) and the techniques currently being applied. Our ideas on the spread of productivity within industries is fragmentary. The chapters on productivity, in the broadest sense (including, for example, trade associations, industrial relations, monopoly policy, etc.), are curiously thin and descriptive as compared, for example, with those on fiscal policy, national income, income distribution, and the foreign balance.

Discounting somewhat these inevitable limitations, certain chapters stand out clearly. Although it badly lacks a breakdown on the pattern of British investment, by sectors of the British and world economy, Mr Seers's survey of national income, production and consumption is valuable. Mr Little's chapter on fiscal policy is an elegant marriage of income analysis and welfare economics; and it is well supplemented by Mr Kennedy's dispassionate account of the evolution of monetary policy, including the cheap money experience under Mr Dalton. Mr Wilson's workmanlike analysis of manpower converges with aspects of Mr Worswick's essay on personal income policy to yield a picture of structural flexibility in both employment and income which contrasts sharply with some of the ideas conventionally held about the capabilities for structural readjustment in post-war Britain. Mr Briggs's chapter on social services poses clearly most of the important and interesting questions that arise from the emergence of a social welfare state. Mr Leyland's essay on productivity ably summarizes what we know and what we do not know in this new area of key importance and interest. Finally, Mr Sargent's account of the evolution and workings of the E.P.U. in his chapter on Britain and Europe, conveys the day-to-day complexities of international trade movements in a fashion rarely imparted to students.

III

The weaknesses and inadequacies of this book do not relate, in any direct way, to the authors or to their clear and useful purpose in its compilation. They reflect a stage in the history of economics and economic policy. If they are faults, they are largely shared by us all. They are, nevertheless, worth examining on the occasion of the appearance of this volume, because text-books, and especially good ones, leave the author peculiarly exposed. The clarity which is required, and the need to set aside the comforting technical paraphernalia available on more professional occasions, reveal starkly what it is that men know and think; what they do not know; and where their structures of thought and the data available fail to grip the problems that concern them.

A general weakness in these analyses is the lack of a firm historical perspective. Despite the brief historical run-ups given in certain chapters, many of these analyses give the impression of having been written by men who, essentially, were born as Keynesians into the post-war world. References to developments in the British inter-war economy are, in most cases, brief and superficial; and the

treatment of the impact of the war on the British economy, its policy, and its international setting, are inadequate. The publication of the forthcoming works of Mr Sayers and Mr Svernilson, as well as the completion of the British war histories under the direction of Sir Keith Hancock, should give us a more solid base for understanding where we now stand in the sweep of modern history and the nature of the deeper forces which have set the framework within which we are now manœuvring.

This is not special pleading designed to suit the occasion of a review published in an historian's trade journal. At every turn, the British post-war problem and the attitudes, pressures, and techniques which determined the response to them, flow directly from the pre-war and war-time experience. This is true even of those matters most susceptible of treatment by short-period tools of analysis; for example, fiscal policy. It is even more directly true of productivity and industrial organization; techniques of government control; and, above all, the question of Britain's foreign balance. The conduct of long-period analysis, immensely difficult and complex as it is, requires by definition knowledge of the movement of forces at work over substantial periods of time—not merely economic forces, in the narrow sense, but those political and social forces and prevalent conceptions which, at any particular period of time, help determine the economic result. We cannot expect to achieve, in the analysis and prescription for long-period problems, anything like the neatness or precision that is possible for short periods. What is required is a sense of the parameters and the range over which they can be pushed and manipulated by intelligent policy. And this, in turn, requires that we examine on a broad front how our posture towards the present has evolved. A glance at the chapter headings of this book—which contrasts sharply with the predominantly monetary analyses conducted by contemporaries in the inter-war period—exhibits how far our interest has shifted to long-period problems, outstripping both our tools of analysis and our collections of data.

The difficulty is, perhaps, best illustrated by the treatment of Britain's international position. Three authors consider the problem in general: Mr Worswick, in his opening essay; Mr Henderson (Chapter 3); and Mr Balogh (Chapter 22). They share, broadly speaking, the following central judgments: Britain's failure to accept proposals for automatic multilateralism was justified; the terms of trade are the villain of the British post-war problem; larger international lending by the United States to the non-dollar world is looked to as necessary for that growth in the world economy which alone promises dynamic balance of payments equilibrium, at a tolerable level of welfare, for Britain. Setting aside (with agreement) the first judgment, the crux of Britain's problem is seen to lie in the process of growth in the world economy—its pattern of production, prices, and income distribution. How deeply do the authors probe these matters?

The treatment of how the terms of trade have come to their present relationship is shallow, and not wholly consistent as among the various authors. More than that, there is no systematic attempt to pierce the veil of this ratio: to isolate the key commodity prices which have determined it; to examine the levels and conditions of production (as well as demand) which have determined prices; the flows of investment (or its failure to flow) which have much influenced the conditions of supply; and the situations, attitudes, and pressures throughout the world which have so drastically affected investment policies. The possibility of an enlarged volume of American investment is invoked as a *deus ex machina*; and it is treated almost wholly as a circumstance which would so expand

demand as to permit the marketing of British exports on the requisite scale. As in the treatment of Britain's domestic economy, there is no adequate examination of the direction of international investment flows, and how they have altered or failed to alter the world structure of production since 1947. The appropriate direction of desirable American investment is considered in only the vaguest of terms. Aside from Mr Balogh's reiteration of his familiar proposition about the implications of the disproportionate growth-rate of the United States (p. 499), and some extremely interesting but limited observations by Miss Ady on the problems of under-developed areas (pp. 569-73) there is no analysis of differential rates of growth of income in regions of the world economy, as they have had and will have their impact on the British economy.

To all of this it may well be objected that the authors were concerned to analyse the British economy rather than the world economy: the British terms of trade are, after all, given by the world environment; and only the United States might generate enough additional resources consciously to reshape the world economy. There is, of course, an element of truth in this view. Many of the obstacles which inhibit the evolution of balanced growth in the world economy are outside the compass of British policy and resources. Some of them are more susceptible of manipulation by the United States. But the Little Englandism of the authors is excessive. The flows of British capital abroad since 1945 have been very large: witness Table 3 on p. 492. Where have they gone and to what structural end? Britain is not without voice, not only in the councils of the Empire and Europe, but also in the International Bank, the various effective organs of the U.N., or even in bilateral conversations with the U.S. Britain is certainly not in a monopolist's relation to its environment (nor, in fact, is the U.S. or the U.S.S.R.); but it enjoys a respectable degree of oligopoly. If this is to be exercised effectively it must be founded in a view of how the world economy is evolving (partially under impulses from Britain), and how it might better evolve, far more precise than any yet constructed.

Looked at another way, however, it can be said that the economists of the post-war have not done too badly. After all, we began with our eyes fixed on full employment as the central issue of public policy, and with the hopeful but inadequate constructs of Bretton Woods and I.T.O. We were out to correct the mistakes of the inter-war period and found ourselves in an environment which had turned 180 degrees in at least two essential respects: the terms of trade had deteriorated as compared to their sharp improvement after 1918; and full employment was almost automatically achieved and sustained. After a variety of intellectual and institutional false starts we emerge now with a near consensus throughout the non-communist world that the heart of the problem (setting aside U.S. short-run income stability and tariff reductions) lies in an appropriate rate and character of growth in certain non-dollar areas, in turn partially dependent on international investment flows appropriate in scale and direction. The emergence of this consensus is no mean achievement. But, as this volume reveals, our current prescriptions do not balance well with our past perspective and emphasis; and the task of maturing our ability to analyse and prescribe for balanced growth lies mainly ahead.

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XXVII. THE UNDER-DEVELOPED ECONOMIES¹

By W. K. HANCOCK

THERE are two remarkable things, says Jacob Viner (Hoselitz, p. 185) about the literature of economic development—the immensity of its output during the past decade, and its paucity during the previous decade. During the 1930's most economists had been thinking of quite different problems; but the war, and international politics since the war, suddenly made economic development a very fashionable subject, particularly in America. How could the economists be expected to switch their minds effectively, when they had been thinking for the most part not of long-term growth but of short-term equilibrium, not of scarce resources but of idle resources, not of saving but of spending? Perhaps they might seek clues in the experience, which many of them had shared, of mobilizing and managing the national war economies; but this experience was in many respects even less to the point than were the theoretical preconceptions of the mid-1930's. In retrospect from 1953, everybody sees the ineptitude of envisaging the East African groundnuts scheme as a 'military operation'; yet that habit of mind found and still finds more generalized expression: define the 'objective' in one column of figures (say of rising national incomes per capita) and define in another column the input (say of capital) that will realize the objective. But will it? Only if territories and societies are assumed to be a kind of raw material that can be mechanically engineered. This assumption is in tune with the common man's idea of practical science—you predict, and by predicting you control. It is in tune with the *ethos* of the dominant economic power of this century, that great engineering nation, the U.S.A. It is in tune with feeling in U.N.O., most of whose members are 'under-developed', and therefore claimants upon the resources of the 'developed' nations. The assumption may have considerable validity in totalitarian countries, where compulsive power can be used ruthlessly for economic ends without counting the costs in human suffering. But in all other countries it is an unplausible assumption, without any firm ground in logic or history.

For many years past Professor Frankel has been attacking this bulldozer theory of economic development. The book under review contains nine of his essays, written between 1947 and 1952. Some of them deal with special issues of economic development, particularly in Africa; others discuss more abstractly the techniques and concepts that properly belong to the literature of development or have improperly found lodgement there. In the first group of essays, two are particularly notable because of the practical influence they have had: a review of the Kongwa experience (which is not merely wisdom after the event, since Frankel played a part in the investigations that led to its winding up) and a shattering attack, entitled *United Nations Primer for Development*, on a well-known U.N.O. Report. The base from which Professor Frankel launches his attack is a closely-reasoned economic philosophy, which is well exemplified in

¹ S. Herbert Frankel, *The Economic Impact on Under-developed Societies* (Oxford: Basil Blackwell, 1953. Pp. 179. 15s.); Bert Hoselitz (ed.), *The Progress of Under-developed Areas* (University of Chicago Press; Cambridge University Press. 1953. Pp. 297. 36s.); Ragnar Nurkse, *Problems of Capital Formation in Under-developed Countries* (Oxford; Blackwell. 1953. Pp. 163. 15s.)

Essay III of this book, *Concepts of Income and Welfare and the Intercomparability of National Income Aggregates*. The present reviewer cannot attempt to follow step by step the argument in which Professor Frankel pulls down the bridges which some economists have laboured to build 'between an accounting and a psychic concept of income'; but he must emphasize some of the conclusions to which the argument leads. To determine the factors which constitute the welfare pattern, Frankel believes, is too complicated a task for mere accountancy; it calls for co-operation between economists, statisticians and sociologists. This is true even for a single homogeneous society. When the welfare patterns of different societies are compared, the accounting method by itself is quite hopeless.

'To endeavour to assess and compare "welfare" merely by comparing national income aggregates for societies with different laws, rules, conventions, hopes and ideals is as fallacious as to try to assess the pleasure which a pair of players derive from playing dominoes, and then compare it with that yielded to another pair engaged in playing chess, by comparing the points scored by the players in each game.' (P. 43.)

Another misuse of national income accountancy which Frankel attacks (Essays IV and V) is the crude attempt, such as that made by the U.N.O. Report of 1951, to use national income figures as *criteria* for decisions to invest in under-developed countries. The attack is very effective. However, its objective has specific limits. Beyond these limits, there is a case to be made for the discriminating use for various purposes of the estimates of investigators such as Miss Deane and Mr Prest. Perhaps Mr Frankel's papers will stimulate these investigators to re-assess the relevance of their work for the study of economic history and the formulation of economic policy in the 'under-developed' countries where they have practised their craft.

Historians will find in Mr Frankel's essays a persistent concern with the social textures with which the threads of economic enterprise are interwoven. Economic factors have no primacy over the sociological ones; rather is there a continuous interplay between the economic, the sociological and the political. 'We so readily tend', he complains (p. 19), 'to speak of "the social consequences of technical change" and not of "technical change as a social consequence".' He would insist, like any economic historian of the Unwinian School, that economic advance signifies community building, and *vice versa*. But perhaps 'community building' is not the correct phrase, although Unwin once used it; it suggests more of conscious plan and power than economists and historians of this mental habit are accustomed to perceive in economic growth. They may have gone too far in discounting the impact of political will upon economic development. Professor Frankel offers for the nineteenth and early twentieth centuries an historical summary of governmental functions which the present reviewer finds too restrictive:

'The role of government in the colonial or dependent peripheral areas was, within the system of thought of the times, clear-cut and consistent. It was to provide (a) political security; (b) due processes of law and incorruptible organs of administration; (c) an adequate fiscal monetary system; and (d) adequate communications and similar public services.' (p. 71.)

An economic historian of Australia, and still more of Japan, would make a longer list of the economic functions of government and would give very great emphasis to some of the additional items.

However, on the main issue—that economic development is not a problem

of economics alone, but of economics, sociology and politics, with history reinforcing all three—Professor Frankel and like-minded people have won the day. How completely they have triumphed in America is illustrated by the programme of papers prepared for the Institute of the Harris Foundation in June 1951, and now edited by Mr Hoselitz under the title, *The Progress of Under-developed Areas*. Of the sixteen papers, four were allocated to 'the historical approach to economic growth'; six to 'the cultural aspects', six to 'the problems of economic policy'. The historians opened the game and it would be pleasant if one could applaud their performance; but alas! they performed unhelpfully. They begged the question even in their definitions; to them the under-developed countries were 'the non-industrialized ones' (p. 5) or those which did not as yet 'live with machines' (p. 30). These definitions determined their themes or perhaps had the intention of justifying themes that had been already determined for other reasons. The first historical paper discussed the sequences and methods of industrialization in France, Germany and Russia; the second discussed the historical antecedents of the non-communist and communist political élites within the contemporary world; the third offered reflections upon immigration into the United States as a transmitter of new skills; the fourth examined the Canadian balance between public and private enterprise and explained why units of large scale are prominent in both sectors. Each of the four papers was learned and interesting but each was remote from the urgent economic problems of African or Asiatic or Latin-American communities. One is led to the conclusion that North American economic historians have given even less attention than their European colleagues have given to the specific problems of research that are relevant, particularly in tropical territories, to current policies of economic development.

The sociologists, for the most part, showed themselves to be in closer focus upon these problems, though some of them also defined development as 'mechanization' or 'industrialization' (pp. 84, 110), while others appeared rather too busy in sharpening their knives for a roast they had not as yet begun to cut, thereby giving some excuse to the administrator who found the social sciences either too under- or over-developed to be of much practical use in a certain under-developed country (p. 235). All the same, two or three at least of the six sociological papers combined theoretical coherence and research experience in a very relevant and helpful manner; for example, the papers contributed by Professors Herskovits and Goldschmidt would be of real value to an economic historian trying to identify his problems of research, let us say in an African territory. (Naturally, it is not from the viewpoint of theoretical sociology, but from that of operational history, that the present reviewer submits his comments.)

Of the six papers devoted to economic policy one or two were rhetorical or thin, but the present reviewer found particular profit in three of them—Mr Bekker's exposition of the Point IV programme, Mr Bloch's discussion of the role of public finance in economic development and Professor Viner's examination of American aims in relation to the progress of under-developed countries. Professor Viner chose the historical approach and his paper by itself outweighs the deficiencies of the professedly historical section of this symposium; for he has a gift for mobilizing historical experience which is relevant to the study of policy. He mobilizes at the same time a sufficiency of theory and current information to emphasize the alternative choices which framers of policy have thrust upon them: for example, he draws a distinction (p. 188) between two

radically different approaches to the planning of economic development which he calls respectively the 'humanitarian' and the 'aristocratic' approach. From this distinction many illuminating but disturbing questions follow.

An economist who comes closely to grips with the problems of capital accumulation must commit himself, it would seem, to the 'aristocratic' or 'austerity' school, though he may acknowledge here and there some *temperamenta*, as Professor Ragnar Nurkse does from time to time in *Problems of Capital Formation in Under-developed Countries*. This book possesses unusual operational value both for the economic historian and the maker or administrator of policy. In a disarming introduction the author clears himself on the Frankel flank by agreeing that 'capital is a necessary but not a sufficient condition of progress' and by enumerating the varied aspects of his problem—social and political, demographic, technological, financial—which he must at best treat cursorily in so short a book. He then leaps straight into his inquiry by sketching in terms of real resources 'the vicious circle of poverty': low income—low capacity to save—low level of capital equipment—low productivity—low income. Usually, as he points out, the trouble at the supply end receives all the attention, but he chooses to open his inquiry from the end of demand. It is the size of the market that limits the inducement to invest. The market does not mean merely territory and population (large and crowded countries will not attract productive investment if people are too poor to buy the products); nor does it mean circulation of money (monetary expansion will merely inflate prices unless there is a corresponding increase of products). Rather do we find ourselves back at Say's law: what sells one good is the production of another. Who would establish a rolling mill in Chile when an efficient mill could produce in three hours sufficient iron shapes of a certain type to satisfy Chilean demand for a whole year? But supposing Chilean productivity can be increased simultaneously over a wide range of industries? Agricultural producers will then create a market for industrial producers and *vice versa*; industrial producers will create markets for each other; it may even in time become profitable to instal the rolling mill. This enlargement of markets and, consequently, of investment opportunities has been the historical task of Schumpeter's 'innovators', but if the innovators are not forthcoming, says Nurkse, the State may act in their stead, as it did in nineteenth-century Japan. Here as elsewhere Nurkse's appeal to historical experience is relevant and timely, though sometimes he oversimplifies the experience (as in his account on p. 52 of eighteenth-century England) and sometimes he ignores what does not fit into his argument. He wants quite rightly to make a case for diversified development, but omits to mention that in many expanding countries of the nineteenth and twentieth centuries precisely this kind of development was set in motion by the impetus of staple exports to world markets. Professor Viner, it may be supposed, would criticize his under-emphasis of the potentially fertilizing effects of world trade. An Australian reviewer may suggest that the doctrines of List are likely to be more fruitful in policy making when foundations have already been laid upon the rock of Adam Smith. Of course, if the age of expanding world markets is closing, as Mr Nurkse seems rather too hastily to assume, local markets will have to supply a larger share of the inducement to invest than they did, let us say, in nineteenth-century Canada. So much the worse, surely, for those communities which wish to follow in the steps of the Canadians.

On the supply side of capital accumulation the author gives separate treatment to densely-populated and to sparsely-populated countries. In the latter

he considers increased efficiency in agriculture to be the appropriate means of releasing labour for capital formation; this generalization is in accord with the historical experience of America and the British Dominions. More baffling is the situation of the densely-populated territories; but Nurkse sees hope in the very centre of bafflement, in the very places where too many people are crowded on too little land. Disguised unemployment is another name for waste of labour and there is no reason in logic why this labour should not be set to making capital goods. In terms of administration there may be great difficulty in getting the labour to the places and the tasks where it is needed; in terms of psychology there may be great difficulty in preventing the farmers from eating more of their own stuff, which formerly they had to share with the *bouches inutiles*. The whole operation depends for its success on feeding the transferred labourers from existing production: otherwise the surplus resources which concealed unemployment represents are absorbed not in capital formation but in consumption. Mr Nurkse does not in fact expect perfect success; 'leakages' to consumption are bound to occur. All the same, provided the government takes determined action to hold consumption down, it can generate the steam for economic development from resources which here and now are available at home.

The proviso, however, is a formidable one. In a very important chapter Mr Nurkse discusses what has been called the 'demonstration effect' of higher standards of living upon people who live at lower standards. He quotes the inquiries of James S. Duesenberry, who finds a correlation between the progressive decline of the American saving classes (three Americans out of four nowadays contribute nothing at all to capital accumulation) and the attraction of the superior consumption goods which richer fellow citizens enjoy. Mr Nurkse fears that the 'demonstration effect' is now operating with increasing power in the international sphere—not merely through the impact of Hollywood standards upon individuals of the rising middle classes but through the impact of 'welfare' conceptions upon poorer people: they want to consume social services more than they want to accumulate capital. 'It is much easier', reflects Mr Nurkse (p. 62), 'to adopt superior consumption methods than improved production methods.' This is a sombre reflection. It means that the willingness to save may diminish even while the capacity to do so is growing.

What remedies exist? A government may take steps to insulate its subjects from the 'demonstration effect'; from this point of view, the iron curtain which Soviet countries have put around themselves may have its economic justification in their high rate of saving. But Mr Nurkse calls this remedy 'defeatist' and looks for alternative ones. External capital can help; productive investment in staple industries did a far better job last century than 'anti-colonial' propaganda is willing nowadays to admit. Certainly it did a better job than the noble-sounding inter-governmental transfers that are fashionable doctrine today; for they can so easily become substitutes for domestic saving, 'so that the country's consumption is increased and little or no addition is made to the rate of accumulation'. There are no windfalls, insists Professor Nurkse, whether by loans or grants or by improvements in the terms of trade, which automatically accrue to capital formation; complementary action on the home front is always necessary to prevent their leakage into consumption.

The concluding chapters of the book examine the commercial and fiscal policies that are appropriate for capital formation. The 'aristocratic' antithesis between consumption and saving is emphasized right to the end. There is consequential emphasis upon the functions of government. Nurkse seems often

to have in mind the historical example of Japan and envisages circumstances (cf. pp. 15, 30, 43, 99-102 *seq.*) in which governments must take action as wideners of markets and creators of demand; as innovators and investors; as depressors of consumption and compellers of saving. All this, however, as opportunity offers or circumstances demand and not as a matter of dogma; Nurske calls upon governments not to substitute themselves for society but to play their strenuous and, if necessary, their harsh part in liberating and mobilizing the energies that are latent within society.

None of the three books that have been reviewed above is a work of historical research; but each of them contains ideas which the researching historian may find fruitful.

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REVIEWS

MOSES I. FINLAY. *Studies in Land and Credit in Ancient Athens, 500-200 B.C. The Horoi-Inscriptions*. (Rutgers University Press. 1951. Pp. xii + 332. \$3.50.)

The *horoi*, which are the central theme of this book, are a group of about two hundred inscribed stones, nearly all from Attica and its dependencies and dating from the fourth and the first half of the third centuries B.C., recording incumbrances on land and house property. The author has republished all the texts, with notes and statistical analyses. To interpret this material he has used all the other evidence available and has on this basis built up a picture of the system of 'Land and Credit in Ancient Athens'. *Horoi* were set up on an estate or house to mark that it was subject to various types of encumbrance. The commonest record something analogous to a mortgage (a term which the author avoids in view of its possibly misleading implications). Another type, the *dotal*, arise from the custom whereby a husband, on receiving his wife's dowry, pledged property of his own of equivalent value to guarantee the return of the dowry in the event of a divorce or of her predeceasing him without issue. Yet another type, the *pupillary*, arose in cases when a lessee of property belonging to an orphan minor pledged (as he was required to do) property of his own sufficient to guarantee the rent and the ultimate restitution of the estate.

The individuals named on the *horoi* are with one exception all Athenian citizens. This is not surprising since the ownership of real property was a jealously guarded privilege of citizens, and to an alien creditor land or house was useless as a pledge: it is a curious result of this rule that most bankers, who were almost invariably resident aliens, were precluded from lending money on real security. The author rightly stresses the social effects of the rule, which tended to divide Athenian economy into two watertight compartments, agriculture and transactions in land, confined to citizens, and trade and commercial loans, to which aliens were confined and where they predominated. Among the lenders there appear, but rarely and in small transactions, public and semi-public corporations including groups called *eranoi*. These last, the author convincingly demonstrates, were not the social clubs which the word sometimes (at a rather later date) designates, but *ad hoc* groups of persons who clubbed together to make a loan. Such loans were generally friendly—to pay a ransom, or very commonly, to buy a slave's freedom—but the author perhaps goes too far when he claims that none of a commercial character are known. The author doubts if the loans made by public corporations were genuine, and hazards the suggestion that they were some form of legal fiction to put the pledged property under the protection of the corporation. The hypothesis seems to be baseless. In one of the documents (*Hesperia*, x (1941), 14, no. 1) the confiscated house had been 'sold' twice to public corporations, in both cases for very small sums, and they both claim repayment of this debt just like a private creditor. The author's objections to a straightforward interpretation of these loans are not cogent. A rich man, like Apollodorus son of Pasion, was often pressed for relatively small sums in cash: the corporations had meagre funds, and no doubt liked to spread their loans; hence a rich man might well borrow several small sums from different corporations in which he had an interest. The transactions recorded on the *horoi*, especially the dowries, are mostly on a relatively large scale,

and the persons concerned, as can be confirmed from other sources, evidently belonged to the richer gentry. This, of course, does not prove that humbler people did not borrow on real security; for minor transactions might not be considered worth the expense of a *horos*. The stones naturally do not reveal the motives of the loans, but the literary evidence suggests that very few were for business purposes; Athenian property owners usually borrowed money because they were—for the time being—hard up.

The book is a thoroughly scholarly monograph: the author knows his source material and the modern literature, and is critical and cautious in his judgments. At the same time he shows a refreshing realism and common sense as well as imagination in interpreting his evidence. The result is an interesting as well as a reliable book, and the reviewer looks forward with pleasure to reading the other volumes which the author promises on the business practices of Greek cities.

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SIR JOHN CRAIG. *The Mint. A History of the London Mint from A.D. 287 to 1948.* (Cambridge University Press. 1953. Pp. xviii + 450. 70s.)

A detailed and reliable history of minting in England has hitherto been lacking. Sir John Craig's book was designed to fill this gap, and it is partially successful. As was to be expected of a former Deputy Master and Comptroller of the Royal Mint, he displays a complete mastery of technical problems and the slow evolution in this country of the various processes required in the production of coins has never before been so fully described. If the account of medieval methods is more incomplete than the description of minting after machinery had been introduced in the early years of Charles II's reign, this is chiefly due to the deficiencies of the evidence for the earlier period. It was not the author's intention to write a numismatic history of the English coinage, but his book does provide a great wealth of authoritative information about English coins of every period. Thus all changes of weight and metal content from the twelfth century to the present day are carefully reconstructed. Sir John Craig's most successful achievement is his account of the institutional history of the Mint. After seignorage on minting had been abolished in 1666 and the Mint had ceased to be regarded as a source of profit to the Crown, its history became mainly a record of administrative changes and of improvements in the methods of minting. In tracing the resulting interplay of administrative convenience and of the pursuit of technical efficiency the author has provided an illuminating study in the development of modern English administration. For this part of his book he relied mainly on the unpublished archives of the Mint, especially the long series of Mint Record Books.

But this is not an economic historian's history of the Mint. Attention is paid only intermittently to economic conditions that governed the supply of precious metals. The medieval section of the book suffers especially from this limitation in the author's interests. No use is made of the works of foreign scholars on the supply and prices of precious metals in medieval Europe and no attempt is made to study this economic problem in England in the light of what happened in other European countries. The author is probably quite right in thinking that most of the successive depreciations of the English coinage in the Middle Ages, with the exception of that of 1464-5, did not go beyond an effort to equate the

Mint's price for bullion with the prices current among merchants and thereby to restore the flow of precious metals to the Mint. But he makes no attempt to study the channels through which bullion reached the Mint. A study of the particulars of Mint accounts preserved among P.R.O. Exchequer Accounts Various, wholly neglected by Sir John Craig, could have revealed, for example, to what extent the supply of bullion depended mainly on a small body of professional dealers. The fact that in the fourteenth century Mint officials were frequently Italians while in the fifteenth century they were mainly recruited from among the London goldsmiths might perhaps be connected with changes in the personnel of money dealers supplying the Mint with bullion. A fuller knowledge of medieval economic history would have saved the author from several errors. Thus he misses completely the significance of the appointment of Orlandino di Poggio as one of the two wardens of the Mint at the time of the great recoinage of 1279. Orlandino was not a native of southern France, but the head in England of the Riccardi of Lucca, the chief bankers of Edward I at that time. By associating him with the Mint the king was assuring the success of the recoinage.

Sir John Craig writes in a pleasant and lively style and he describes the most complex transactions with great clarity. But his book suffers from a predominantly chronological arrangement and a reader interested in some particular topic might have much difficulty in discovering all the information available about it. The rareness of footnotes and the summary character of the bibliography often make it impossible to test his statements and conclusions. This is all the more regrettable as his book is marred by negligent proof-reading and by recurrent factual errors. But it is a very interesting and valuable work, finely produced and beautifully illustrated.

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L. E. HARRIS. *Vermuyden and the Fens. A Study of Sir Cornelius Vermuyden and the Great Level.* (Cleaver-Hume Press. 1953. Pp. 168. 21s.)

The life and work of Vermuyden have long been the subject of vigorous comment. Samuel Smiles regarded him as a noble instance of self-help: later writers, like Miller and Skertchley (in their *Fenland Past and Present* (1878)) could find little good to say of him. The 'wily Dutchman', they thought, 'began badly, progressed ignorantly, and finished disastrously'. He did not understand, they concluded, the peculiar problems of Fen drainage, so that this 'great but mistaken man' divided into three problems what should have been treated as one problem, and, worst of all, ignored the fundamental problem of the outfall. But for Smiles, Skertchley thought, Vermuyden would have gone down unhonoured to posterity. Clearly any judgment on Vermuyden must assess the value of such major criticisms, a task which the historian can hardly undertake unaided. Korthals-Altes, an engineer himself, published a study of Vermuyden in 1925. Mr Doran, the Chief Engineer of the Ouse River Board, added an article some years later in which he drew attention to fundamental similarities between Vermuyden's scheme of 1642 and the Macdonald scheme of 1949. More recently still, Dr van Veen, Chief Engineer of the Dutch *Rijkswaterstaat*, dealt with Vermuyden's place in the history of reclamation. The author of the present work, however, combines the authority of the engineer with unusual historical and antiquarian knowledge.

The professional verdict, which Mr Harris advances with clarity and conviction, goes a long way to redeem Vermuyden's reputation as an engineer. His plan, it would seem, neither divided the indivisible nor neglected the outfall problem. In essence it was sound and if in practice it was not wholly satisfactory, this was due more to obstacles deliberately placed in the author's path or to later unforeseeable developments in the terrain. By a combination of research, logic and imagination, Mr Harris has been able to reconstruct the whole of Vermuyden's career from the early works at Dagenham to the larger, abortive scheme at Hatfield Chase and so to the Great Level. To this he has added an interesting study of Vermuyden's family life and affairs which ends by scotching yet another legend—the tale of his early death in poverty. A note on the disputed portrait attributed to van Miereveld rounds off what is clearly not only a labour of love but a very thorough piece of specialized research. The antiquarian may regret that there is nothing here about those whom Vermuyden employed in his great schemes and who are commemorated in the lists of the immigrant congregations at Sandtoft, Thorney and elsewhere. The agrarian historian may wish there had been more about the agrarian consequences of the reclamation. The Neo-Smilesian will ask more questions about Vermuyden as an entrepreneur. But these are matters which can wait a little longer. For the moment we must be thankful for an authoritative judgment on one of the most ambitious of projectors and a convincing analysis of his project.

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VINCENT HARLOW and FREDERICK MADDEN (eds.). *British Colonial Developments, 1774–1834*. (Oxford University Press. 1953. Pp. 619. 35s.)

For a period of sixty years this is a lengthy volume of documents. But they were sixty years of great and significant experiment and change, and few would even cavil at the use of the word *developments* in the title. The selection of documents on little-studied parts of the empire, Malta, Ceylon, individual West Indian Islands and Guiana, is attractive and purposeful. In other ways, too, the selection is admirable. There is a fairly even balance between documents printed from original sources and from published works; statutes and parliamentary speeches (except for the Quebec Act and the Canada Act) are not included, nor are documents which are in easily accessible collections. The object of the editors has not been to give a documentary history of the internal developments of the colonial territories nor to give a comprehensive documentation of the period as a whole, but to make available documents which have hitherto been out of the reach of the average student. This they have certainly accomplished in a notable way.

Commentary and explanation are limited to brief footnotes. This is probably a pity, and will detract from the value of the volume. Where the book is used as a basis for an organized course of lectures the documents will, of course, be supplemented by comment. But where an individual reader—in particular a reader interested in the economic problems—approaches the volume as a work of reference he must either thumb through all the pages or depend for guidance upon the section-headings or on the index.

The section-headings indicate the topics under which the editors would study the developments of the period—the repercussions of the American Revolution; the attempts at a balanced constitution in Canada and at a benevolent Crown

Colony system elsewhere; the causes, consequences and regulation of emigration; the abandonment of the slave trade and of slavery, and the prelude to Free Trade. The first section under which these problems are considered is that of the Indian and Pacific Oceans, and here little fault could be found with a well-chosen and stimulating selection. There is much of economic interest rightly interspersed with theory and with constitutional precept. Most cogent, perhaps, is Raffles' memorandum on British commercial policy in the East Indies, with its insistence that 'trade, and not territory, is our object'. Of great interest, but perhaps of less weight, are Alexander Dalrymple's plans and John Meare's evidence on a trans-Pacific fur-trade to China and Japan.

The second section is called 'Constitutional Developments' and contains a most useful and balanced choice on both the Crown Colony system and on the development of representative government. Here, however, the reader who is dependent on the section-headings would overlook such economic elements as Raffles' Minute on Internal Management and Land Rent in Java, his abandonment of forced deliveries, modifications of the customs system and encouragement of teak and of coffee. Equally submerged in this section are the maintenance of all the old commercial regulations in the Quebec Act and the interesting use of revenue collectors in Ceylon to give agricultural advances in seed, clothing and agricultural tools. In fact, problems of commercial advantages, of land-tenure and of taxation, run through all the constitutional enactments and memoranda of the period, and without further guidance the reader could easily be misled by the title to this section. The remainder of the sections, on Commercial Development, on Emigration and Settlement, on Frontier Problems and on Humanitarian Principles, piece together and make an admirable collection of evidence. Yet throughout there remains the problem of commentary and comparison. To some extent this is covered by a list of reading recommended in the Preface. But it is doubtful if a mere reading of Wakefield's *Letter from Sydney*, as recommended, would make a reader able to deal with the extracts on Swan River; and anyone who could supply the background of the half-breed opposition to Selkirk's Red River Colony would not need the documents printed here, interesting as they are. Without such a background these and many other documents must be misleading.

The lack of comment, and the somewhat arbitrary divisions into sections, would be less important if the index of the volume were equal to the merits of the selection. But the index is concerned only with proper names, of persons or of places. To the reader concerned with economic problems this is particularly unfortunate, for neither the raw materials of the discussions—the cotton, gold, sugar, bullion, shipping or population—nor the concepts discussed, find any place here.

The result is a volume which all who teach imperial history will welcome and will expound and comment upon with pleasure. Those who realize its wealth and merit will wish to use it for reference and will regret that it could not have carried a better index or more critical comment, or both.

E. E. RICH

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The Works and Correspondence of David Ricardo. Edited by PIERO SRAFFA with the collaboration of M. H. DOBB. (Cambridge: at the University Press for the Royal Economic Society, 1952. Vol. VI, *Letters*, 1810–1815. Pp. xli+353. Vol. VII, *Letters*, 1816–1818. Pp. xi+387. Vol. VIII, *Letters*, 1819–June 1821. Pp. xi+403. Vol. IX, *Letters*, July 1821–1823. Pp. xi+401. 24s. each.)

The most fascinating aspect of the publication of Ricardo's letters is the opportunity they present for the study of the evolution of a system in the mind of a single thinker: it is difficult to find a parallel anywhere to the opportunity here offered to the public to watch a powerful social theorist at work. Though even this range of written evidence does not render Ricardo's mental processes wholly transparent, yet it is an unrivalled exposure of an individual struggling to systematize his observations of a particular aspect of human behaviour.

Though Ricardo had been interested in political economy since 1799 the letters start in 1810 with his early monetary thought. By 1813 the circulating medium and the exchanges had carried the discussion via the opening or extension of markets, to the problem of profits. This invoked the great debate on the laws regulating the distribution of the product between the contributing social classes. The fundamentals of the distributive process were laid down in a few months, and remained the core of Ricardo's system throughout his life. But toward the end of 1815, in the attempt to put together the *Principles*, he found himself trying to reason back to his distribution theory, starting from the relative prices of particular products—what Marx called the 'economic cell form'. Death overtook him while still struggling to integrate the two approaches in a consistent and comprehensive way. Many problems are thus raised for the student of systems: is the sequence in which a man adopts his leading ideas important to the understanding of his thought, how far does he himself become bound by the categories into which he throws his reasoning, on what terms may enlightened antagonists hope to find reconciliation or at least to understand the nature of their differences, to what extent may a system be unco-ordinated yet valid—or in economic terms what degree of independence of value theory can a theory of distribution enjoy?

It was a characteristic of land that underlay Ricardo's distribution theory: a characteristic of labour that dominated his reasoning on value. Malthus had raised the question of profits—what were the limits to their increase as a share of the net product? For him the reward to capital should be explained on supply and demand lines: land, labour and capital were all susceptible to this approach. But the concept of diminishing returns to land had taken a convulsive grip on Ricardo's mind. It meant that the rent share increased as the differential between fertile and marginal land widened; it meant also a continuous rise in the real cost of maintaining the labouring population, so that the relative share of the product consumed by this class must progressively increase. Profits, for Ricardo the residual of the process, must perforce shrink. Thus, as he put it (VII, 78), 'profits depend on wages, wages under common circumstances, on the price of food and necessaries, and the price of food and necessaries on the last cultivated land'. This outcome depended not on any characteristic of labour, for this was assumed homogeneous, but upon the reaction of land to this variable factor: labour applied in different situations differed in its productivity—the dominant circumstance lay in the situation.

The sheet-anchor of Ricardo's thinking, his theory of distribution, demanded

that he treat exchange-value in terms of real cost. Even before he had 'been stopped by the question of price', in writing the *Principles*, he had been attacking Say's subjective utility approach. Does the choice of labour demonstrate, as has been argued by Dr Meek, that Ricardo entertained a 'profound sociological assumption' that labour power was 'the primary and most essential form of cost' (*Economica*, Feb. 1950, p. 53), and that he chose it for such 'real' reasons? Is it not at least equally plausible that it was his distribution theory, innocent of such sociological assumptions, that compelled him to real cost, and that labour seemed to offer itself as a universal equivalent rather than as the expression of a social philosophy? 'Objective' value in this sense had played its part in discussion for a long time; it was at least as old as Aristotle. In distribution theory the desire to attain determinancy was probably as strong as social realism; Ricardo was attracted to reasoning in terms of class shares to some degree at least because this seemed to give 'tolerably certain' relationships, as opposed to what he called Malthus's labyrinths. The tone of his letters seems to suggest little awareness of the unique nature of the labour contribution as later presented by Marx; it would appear that the correspondence provides little warrant for this view.

What perhaps is remarkable about Ricardo's value theory is that, though he was one of the Benthamite circle, and produced his system under the very eye of James Mill, yet both with respect to goods and to effort, subjectivism held no place, and it was left to Jevons to reach back to Locke and assert the subjectivist dichotomy. It is extraordinary that these exponents of felicity contributed to and admired a system in which it had no part. But surely it would be unwise to deduce from this that 'realistic' social thinking caused them to make an exception in political economy to the application of the subjective calculus as a guide to social welfare.

The route from value back to distribution lies through the firm or production unit. But in this respect Ricardo, like Smith, was 'pre-industrial'. Dr Meek argues (*ibid.* p. 53) that Ricardo's thinking was dominated by the transition from an agricultural economy to a manufacturing one; as evidence to the contrary we have his apparent lack of awareness of the need to study the emergence of new and complex units of production. Only by confining the theory of the firm to constant costs and uniform capital ratios could the two ends of Ricardo's system be kept in some sort of unity. But the idiom of the firm was not only wholly outside Ricardo's experience; it was also alien to his class aggregates and embodied labour because it focused attention upon returns to scale, the problem of capital, and the combination and substitution of factors.

Could Ricardo's theory of distribution be treated as a set of propositions the validity of which was independent of the conundrum of particular price or value? Could he have solved his problem as stated in the Preface without tackling value theory; more generally, is it possible to maintain a theory of distribution without integrating it with a set of deterministic statements about value? By the neo-classical approach, which imputes rewards to factors from their contribution to the product, the answer would appear to be no. But a theory proceeding in terms of a few more or less homogeneous social classes, each distinguished by the collective ownership of a particular factor, is much more likely to be independent of price or value phenomena. Such a system is 'determined', though of course it may be unreal. Yet it is the orthodox followers of Marx, who, though maintaining a system of class distribution, most vigorously

assert the necessary interdependence of distribution and value theory, and who energetically resist the heresy that the one can stand without the other.

Marx tells us that Ricardo 'starts' with the determination of value by labour time; this is clearly not so chronologically, and is dubious as a statement of emphasis. This was not the problem of the Preface; it was a left-over which threatened the destruction of his system. Ricardo more truly 'finished' with labour time, striving to the end to integrate it with his statement of the laws which regulate distribution. Why then did he himself attach so much importance to the attempt to merge his two chains of reasoning, from factors and from goods? There is of course the view that no theory is adequate unless it embraces the whole of a subject in all its aspects. Particular price had to be explained if a complete system was to emerge—Ricardo, like so many great thinkers, was struggling after universal explanation. But his distribution theory started from aggregates, bound together within categories each with its own peculiar law; to decompose these aggregates into their 'cell-forms' and establish the laws of value affecting them meant that unreal assumptions about productive units were unavoidable.

No doubt the successors of Ricardo, as Dr Meek argues (*ibid.* p. 55), were to some degree encouraged to drop the labour theory because they feared its political implications. But they were also left with a system the ends of which could not properly be made to meet. It must have seemed clear that one or both branches were formulated in an intractable way. Mr Hutchison holds (*Economica*, November 1952, p. 424) that the Ricardian distribution theory dropped out of English economics for reasons of sterility. As to value theory, it is difficult to conceive how, if you start reasoning from the product, without seeking to attain a goal derived from other sources, you can avoid subjective utility.

Did the economists of the 1830's onward emasculate the real Ricardo because of political fears, or did they choose new formulations because the Ricardian distribution and value schemes were proving barren? It seems that the 'peculiar' doctrines of Ricardo were largely abandoned by the new thinkers, the 'vulgar economists', of the 1830's (though there is a very real survival of them in John Stuart Mill). But in judging Ricardo's impact upon policy in the two or three decades after his death this is not what mattered. His system as he himself conceived it, yielded the same policy prescriptions as Smith's had done, but with greater point. The essence of Ricardo was the free market as arbitrator and stabilizer. The growing rent share and the rising real cost of labour maintenance was to be arrested in Ricardo's view, not by policy derived from the labour theory, but by postponing the impact of diminishing returns as long as possible. Finally, 'Mr Mill's principle', or Say's law, was fundamental; for Ricardo well knew that his system could not stand without the automatic preservation of proportionalities. If instability were typical, then the simple long-term movements upon which he relied would be no longer plausible.

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A. L. DUNHAM. *La Révolution industrielle en France, 1815-1848*. (Paris: Librairie Marcel Rivière, 1953. Pp. xvi+417. 1200 fr.)

The opinion has been expressed that the transition from an agrarian to an industrial economy follows a very familiar pattern in all countries in which this change has taken place. It is no doubt possible to detect similarities in the

process of industrialization but it is equally true that there have been unique features in every 'industrial revolution'. In France the progress of industrialization in the nineteenth century was so slow that Clapham went so far as to write that 'it might be said that France never went through an industrial revolution'. The relatively slow development of modern French manufactures was due to such factors as inadequate supplies of coal and iron ore, insufficient capital, excessive regulation of industry, poor communications, undue concentration on luxury industries, the commercial policy of prohibitions and high import duties, the stringent navigation laws and the relative immobility of labour.

Much light is thrown on the very gradual growth of large-scale modern manufactures in France by Professor Dunham's book. It covers the same period as Henri Sée's *La Vie économique de la France sous la monarchie censitaire*, but Professor Dunham has written a longer and more detailed study and he has been able to make use of numerous monographs and articles that have appeared since Sée was writing in the 1920's. After a brief introduction on economic conditions at the end of the Napoleonic wars the author examines progress in transport, coalmining, capital, machinery, the main branches of manufacture, craft industries, commerce at home and abroad, foreign influences upon French economic developments, and the part played by the State in fostering economic progress. This arrangement of the material no doubt has its advantages though if economic developments during the Restoration and the July monarchy were examined separately it would be possible to emphasize the fact that greater progress was made in the reign of Louis Philippe than in the period of reconstruction after the Napoleonic wars.

It is a compliment to the author rather than a criticism to ask for more. It would have added to the merits of the book if Professor Dunham had followed Sée and Clapham by examining in a separate chapter the changes that occurred in farming and forestry between 1815 and 1848. In a study of industrialization it is desirable to show clearly the dependence of important branches of industry upon agriculture. The survey of the influence of foreign countries upon French economic developments might have been extended beyond Britain and Belgium to include Germany and Switzerland. In the bibliography reference might have been made to Chaptal's *De l'Industrie française*, Beck's *Geschichte des Eisens* and the well-known studies of the Alsace cotton industry by Herkner and Klein. It is unfortunate that Galloway's ill-founded statement that as many as 15,000 or 20,000 English workers were employed in France in 1824 should have been repeated (p. 157).

Professor Dunham's survey of the industrialization of France between 1815 and 1848 should be read in conjunction with his equally valuable book on the Anglo-French commercial treaty of 1860 in which he has shown that the industrialization of France proceeded more rapidly under the Second Empire than under the July Monarchy. Recent studies—such as those by Duveau on the French workers, by Girard on public works, by Schnerb on Rouher, and by Maurain on Baroche—have emphasized the significance of Napoleon III's reign in the modern economic development of France.

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WALTER BUCKINGHAM SMITH. *Economic Aspects of the Second Bank of the United States*. (Harvard University Press; London: Geoffrey Cumberlege. 1953. Pp. xii + 314. 32s. 6d.)

R. H. C. Catterall's *The Second Bank of the United States* held its field for half a century and was a fine piece of work in its day; but Catterall's treatment of the statistical data was deficient and moreover his book gave scarcely any attention to the Bank's history after 1836. The time was clearly ripe for a reappraisal that would treat the Bank in its context of the American economy. This Professor Smith has done, with a large measure of success. The first part of his book contains a survey of the growth and fluctuations of the American economy during the Bank's lifetime (1816-41) together with an account of the structure of banking and its relation to public finance and international trade and lending. The second part traces the history of the Bank chronologically. This separation of the background and the narrative was probably the right procedure to adopt, but it naturally involves certain disadvantages. In Part II, in particular, one might have wished for a more extended treatment of the causes of the fluctuations in business activity that formed the Bank's environment. Professor Smith rightly emphasizes the absurdity of regarding the Bank itself as the prime cause of these fluctuations, but what the real causes were does not always emerge entirely clearly. But this is a minor criticism of a book which will certainly become a standard reference.

Professor Smith's assessment of the Bank is on the whole a favourable one, at least as relates to the period before 1836. He gives an interesting account of the contribution made by the Bank to the mechanism of exchange between different parts of the United States and in the foreign exchange market, in both of which types of dealing it did the bulk of the business. In principle, at least, both Biddle and Cheves (his predecessor as President of the Bank) were aware of the Bank's duties as lender of last resort, though fears for the Bank's own position sometimes inhibited it from carrying this principle fully into practice.

In other respects, too, modern ideas of the functions of a central bank can be found foreshadowed in the Bank's policies. The evidence given by Professor Smith supports the view that the Bank deserves a large share of the credit for the comparative stability of the United States banking system during the 1820's. Professor Smith does not have any single simple explanation to give for the deterioration in the standard of management of the Bank in its later years. This remains, and perhaps must remain, something of a mystery. The change in the Bank's policy is sometimes thought of as the change from a deflationist to an inflationist philosophy; but these concepts are probably not the appropriate ones to use in this connexion. In theory, if not in practice, the Bank's policy seems throughout to have been to provide sufficient currency to meet 'the needs of trade', while on the one hand discouraging speculation and on the other mitigating the worst effects of crises and depressions. It was as means to the latter objective that the Bank's spokesmen sought to defend the dangerous reduction in the liquidity of its assets that occurred in and after 1837 and led ultimately to its failure. But it seems clear that the trouble was at least partly that as time went on Biddle became too self-confident and too prone to act on his own initiative without consulting the Bank's other directors and officials. When finally the Bank's position had become seriously unsafe, the desperate policies pursued in the attempt to save itself merely hastened the end.

R. C. O. MATTHEWS

T. W. HUTCHISON. *A Review of Economic Doctrines 1870-1929*. (Oxford: Clarendon Press. 1953. Pp. xiv + 456. 30s.)

J. A. SCHUMPETER. *Ten Great Economists*. (George Allen and Unwin. 1952. Pp. xiv + 305. 21s.)

The emergence of economics as a reputable professional study has been accompanied by the development of an approach to the history of economic thought in terms of the origin and evolution of concepts and techniques of theoretical analysis. This approach, which is shared by the two authors under review, demands a high level of theoretical ability to be effective, and is open to bias through its inherent teleology; but wisely applied it can illuminate both the past and the present, as it does in these two volumes.

Mr Hutchison's review of economic doctrines in the 'neo-classical' period is concerned with two broad trends: on the one hand, the replacement of classical economics by the neo-classical synthesis based on static maximization principles and their elaboration, and the correlative development of explicitly dynamic analysis: on the other hand, the (largely independent) development from fragmentary observations on commercial crises towards an integrated theory of the trade cycle. The first theme occupies the major part of the book, and is discussed in two Parts: Part I surveys the works of the great treatise-writers and their critics, while Part II traces subsequent developments during the period in four major problem areas. Part III outlines the evolution of trade-cycle theory, and includes a chapter on economists' views on the unemployment problem in this country since 1885.

The book is impressive for its broad scholarship and literary quality. Almost all the major European and American contributors to economics in the period are knowledgeably discussed, with the major exception of Marx, who receives no detailed attention in spite of the fact that much of the work of the Austrians can only be understood as a reaction against him; and the author's comments on his subjects are invariably fresh and stimulating. On the other hand, there is in some cases a certain unwillingness or inability to meet the economists of the past halfway, to master the internal logic of their systems of thought; and a tendency to evaluate them according to how well they foresaw modern economics as the author understands it, which is particularly irritating because the author takes a fairly rigidly Keynesian view of neo-classical economics. It is also questionable how far the author's theme of a trend towards dynamic theory is a justifiable descriptive summary since much modern work has been devoted to further elaboration of static maximization problems. On the whole, however, this is a book which admirably fills a gap in the literature of the history of economic thought—though the reader should be warned that it requires a prior understanding of modern theory for its full appreciation.

The other volume is a collection of essays, previously published over a forty-year period, for the most part on death or anniversary occasions. While Schumpeter's critical sense is occasionally subordinated to the effulgence conventionally required of obituary prose, and to the natural tendency to do more than justice to quondam colleagues, his fine appreciation of creative achievement in economic theory and his understanding of social and psychological influences on thought thoroughly justify the reproduction of these tributes in this more accessible form. Except for the analysis of Marx reprinted from *Capitalism, Socialism and Democracy*, the most penetrating essay is that on Marshall, the economist with whom Schumpeter was least sympathetic.

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W. ASHWORTH. *History of the Second World War. Contracts and Finance.* (H.M.S.O. and Longmans, Green and Co. 1953. Pp. x+309. 22s. 6d.)

This is the second volume to appear in the War Production Series of war histories, directed by Professor Postan. In it, Mr Ashworth has taken as his main themes the erosion of Treasury control in the course of the war, the development of new contract price policies in place of competitive tendering, and the increasing participation of the Government in the finance of industry. In addition he manages to embrace a large number of subsidiary topics, such as the insurance of commodities, the utilization of patents, the mechanism of price control and banking and fiscal policy.

The book is such a thorough and scholarly survey of the ground it covers as to leave a reviewer little scope for criticism. The only fault I have to find is one of omission: I would have valued a more careful weighing of the evidence on the extent to which contractual and fiscal policy succeeded in preserving a financial incentive to efficient production. Mr Ashworth's conclusions on this point (p. 242) are somewhat cursory. He quotes Lord Pethick-Lawrence to the effect that:

We retain the form of capitalism, and yet we take away from it most of the motive power which, in ordinary circumstances, is expected to run it... The costing system is designed to reduce profits to a minimum, the Excess Profits Tax is designed to drain off everything beyond a predetermined maximum...

and then gives us his own view that, 'The financial incentive was still given a fair amount of scope, though it was subject to more limitations than in peacetime...'. But how much is 'a fair amount' of scope, and in which sectors of the economy was it to be found? It would presumably not be found to any appreciable extent among businesses subject to E.P.T. (unfortunately we are not told how many fell within that category), nor in the R.O.F.'s and other Government undertakings. Moreover, in factories managed on an agency basis 'there was little scope for the use of incentive bonuses' (p. 152) and the same seems to have been true of most work done on costed contracts (where the contract price was calculated retrospectively, on the basis of the actual costs incurred by the contractor). Only in the case of the private business not paying E.P.T. and working on so-called fixed price contracts can the profit motive have provided an appreciable incentive to efficiency. And even here the fixed price, instead of being 'fixed before production began or at a very early stage in production', was sometimes settled belatedly (pp. 78, 116), presumably on the basis of the actual costs already incurred in executing the major portion of the contract. Moreover, when a contract had been completed, and a further contract had to be negotiated, the new fixed price was apparently set low enough to prevent the contractor from deriving further benefit from any cost reductions he had effected in the course of executing the earlier contract.

If my assessment of the position is correct, it is indeed difficult not to sympathize with the widespread view among businessmen that the price clauses in Government contracts during the war operated mainly to restrict profits, not to reduce costs, and thus to a considerable extent merely duplicated the function of the E.P.T. Yet, as was pointed out by the Select Committee on National Expenditure, 'so far as concerns the *public interest*, looseness about costs must be much more damaging than looseness about profit margins' (p. 89).

Though these matters could in my opinion have usefully been considered at

somewhat greater length by Mr Ashworth, I have no wish to labour my one criticism of this highly creditable work.

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ANDRÉ MARCHAL. *La Pensée économique en France depuis 1945*. (Paris: Presses Universitaires de France. 1953. Pp. viii + 240. 700 fr.)

One's first impression on reading this book is surprise at the output for which French economists have been responsible since the war. (The bibliography of books and articles here covers 36 pages and includes some 500 entries, while the index refers to more than a hundred authors.) Even when one has allowed for the popularity in France of the short monograph, the result remains impressive. In the past there seems to have been relatively little interchange between French economic thought and English (unless one includes the Lausanne School in 'French'): at any rate, in recent years French economic writing has been little known among English economists, and has had less influence upon them. (While a few names such as Aftalion, Allais, Rist, Rueff, Pirou and Perroux have been familiar, I wonder how many in this country could claim any serious acquaintance with their writings.) What further comes as a surprise is the extent to which recent discussion in French economic circles has been about methodology, and the extent to which it has been critical alike of the formalism of mathematical economics (although this has not been without its defenders, such as M. Allais) and of traditional method and assumptions, whether of the Austrian, Lausanne or English school. This impression may be partly the result of the author's own predilections, which are towards institutionalism; but there is sufficient evidence in what he quotes to show that iconoclasm has been a significant trend. Discussion has not been confined within the bounds of the so-called Keynesian revolution, though no doubt influenced thereby. The author echoes M. Henri Denis in speaking of a 'crisis of economic thought', or at least of 'classical economy'; and this he treats as a reflection of 'the economic world in full transformation' from 'the individualism of the nineteenth century' to the 'associationism which characterises the twentieth century'. Economic theory, traditionally elaborated to explain the automatic functioning of economic mechanisms, needs to be re-thought to fit a more *étatiste* world to-day: moreover, it should 'to-day take into account, not only the functioning of economic mechanisms, but also the evolution of structures over a long period'.

The result is a survey which is stimulating in its suggestions and in the interesting new angles which it puts upon familiar topics. The headings of the three parts into which the book is divided afford some idea of the scope of Professor Marchal's essay—for it has the character of a longish and brightly-written essay rather than of an *opus*: these are, 'Economists of the Classical Tradition', 'Economists of a Realistic and Sociological Tradition', 'Economists of Observation'. Of these the first and third parts are quite short, and the second part much the longest. Needless to say, the fertile ideas of François Perroux bulk large. Among points of interest one notes particularly the latter's notion of 'economic dominance' and of 'macro-decisions', and of dominance and the strategies of groups as key dynamic factors (taking a similar place to 'innovations' in Schumpeter's system). We also find an emphasis on something called, rather vaguely, 'economic structure' (the author's own theory of profit, a little akin to Schumpeter's, is that 'profit is the result in large measure of action

exerted on structures'; entrepreneurs, instead of remaining passive and annexing the rents of existing market-imperfections, striving continually to enhance these imperfections); and again emphasis upon the importance in handling dynamic problems of using the notion of 'irreversible causal relations', rather than that of 'mutual dependence'. Characteristically the chapter 'De la Statique à la Dynamique' which closes Part Two is occupied with 'long period dynamics' (one of the theories summarized claiming to find a 'three-century cycle' operating throughout history). It is all rather like listening-in to an unusually bright graduate seminar: one comes away stimulated and thoughtful. Yet afterwards, when there has been time for sour reflection, one sums it up as mainly critical *aperçus* and illuminating asides rather than finished thought. Is it ungracious to end by recording the impression of having here been treated to *prolegomena* and to pleasing talk about a journey to the lighthouse on which no one seems yet to have started? Probably one could not reasonably expect more in a progress-report on only eight years. The result is at any rate well worth reading and pondering.

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Trinity College, Cambridge

SHORT REVIEWS

HERBERT HEATON. *A Scholar in Action: Edwin F. Gay*. (Harvard University Press; London: Geoffrey Cumberlege. 1952. Pp. vi+260. 27s. 6d.) To economic historians Edwin F. Gay's name is mainly familiar on account of his criticism of I. S. Leadam's conclusions with regard to the early phases of the Tudor enclosure movement. That revealed a promise which was never fulfilled. Professor Heaton gives the reason. Gay's preparation had been thorough and even leisurely. He spent over twelve years of study in Europe, mostly in Germany, where he came under the inspiring influence of Gustav Schmoller. A life devoted to scholarship was his ideal; but the possibility of pursuing it was always eluding him. He was appointed Instructor in Economic History at Harvard in 1902 when he was already thirty-five; six years later he was induced to accept the deanship of the newly-founded Graduate School of Business there. This was an assignment rather outside his range of interests (Professor Heaton instances the similar choice made by W. J. Ashley when he left the Chair of Economic History at Harvard to organize the Faculty of Commerce in Birmingham). Gay characteristically set himself to make his new project a success and for ten years it absorbed his energies. The task brought him into touch with the American business world and when war came he and his colleagues were almost inevitably drawn into the practical issues which then arose. His particular contribution—and it was a vital one—was the organization of shipping. On the conclusion of hostilities many approaches were made to him and he made what proved, financially at any rate, an unfortunate choice. He attempted as president of the *New York Evening Post* (1919-23) to recover the ground that journal had lost. After this failure he returned to Harvard as Professor of Economic History (1924-36): but his commitments outside made heavy demands on his time, for he seems to have been constitutionally unable to resist requests that he should assist in a great variety of sociological investigations. During these years, however, he took a keen interest in the launching of the *Journal of Economic and Business History*, acting as editor, while N. S. B. Gras

the Professor of Business History, was managing editor. Also with E. R. A. Seligman he planned the *Encyclopaedia of the Social Sciences*, attending to the financial side of the project; he himself merely contributed one article, that on the Putting Out System. The opportunity to devote himself entirely to research under ideal conditions seemed to have arrived in 1936 when he was appointed to the research staff of the Huntington Library. He had at spare moments over many years collected material for a detailed study of the Industrial Revolution. His temptation was to continue collecting and postpone the labour of writing. Even in California, too, he could not resist invitations to undertake the long journey to the Eastern States to attend conferences or to deliver lectures. While he would not admit that his *magnum opus* would never be completed, he made no serious effort after 1940 to embark upon the writing of it. Gay was quite conscious that he had been again and again diverted from his chosen career, but he always entertained his hope that he would gain some years of leisure to return to it. The writing of this memoir was sponsored by Gay's many friends. They must be well pleased with the skill and sympathy Professor Heaton has displayed in the execution of his task.

J. F. REES

University of Ceylon

W. F. LEEMANS. *The Old Babylonian Merchant: His Business and His Social Position*. (Leiden, E. J. Brill, 1950 (Studia Et Documenta Ad Iura Orientis Antiqui Pertinentia Volumen III).) This work is a study of the role played by the merchant (*tamkārūm*) in Old-Babylonian times (1961-1534 B.C.). It is here clearly demonstrated that his functions were those of a travelling merchant in goods, a broker, whose merchandise is sold by agents, a man who finances trading enterprises, and a money-lender. The historical development of the *tamkārūm* is traced from his acting on behalf of the palace to his emergence as a private merchant and then to the eventual passing of trade once more into the hands of the government, so that wealthy and prominent *tāmkarū* were no longer found during Hammurabi's reign. Leemans deals with the position of the merchant in Babylonia during this period. It would be interesting to examine, in the light of the new information given here, the Biblical references to the merchant. It is noteworthy, for example, that the Hebrew word *makhar* 'to sell' bears a remarkable affinity to the word *tamkārūm*. Furthermore, it is worth noting that Babylon still retained its reputation as the trading country of antiquity as late as the Sassanian period, two thousand years after the period dealt with by Leemans. The imports and exports in Sassanian times are almost identical with the ones described by Leemans, though, due to the Sassanian aversion to commerce, under the influence of Zoroastrianism, this activity was no longer in the hands of the natives of Babylonia but in those of the Jews, Armenians and Roman captives.

L. JACOBS

OLWEN BROGAN. *Roman Gaul*. (G. Bell and Sons. 1953. Pp. x+250. 21s). The author modestly states that 'this book does not attempt to instruct the expert, but only to serve as an introduction to students and travellers who may wish to get a general picture of Roman Gaul, its history and its chief monuments'. It will certainly serve the latter purpose well, being concise and readable, despite the great mass of material which it covers. But serious students of the Roman Empire who are not specialists in Romano-Gallic archaeology, will also find the book immensely useful; for Mrs Brogan is an expert in that field and knows the ancient sites, the museums and the archaeological literature of France as few Englishmen do. She is less at home in the political history, and makes some slips in the narrative chapters: on p. 42, for instance, it should have

been said that Gallia Narbonensis was given back to the senate in 22 B.C., not 'left under the control of the Roman Senate', and on p. 234 she conflates Constans with his brother Constantius with rather confusing effects. Such errors, however, hardly affect the value of a book which is devoted to a description of the archaeological remains and their significance for the social and economic history of Gaul. In this field the author makes a useful synthesis of the literary and archaeological evidence on such topics as the growth and decay of the towns, trade and industry, the villas and the organization of agriculture, art and popular religion. Such summaries of the archaeological data and its historical significance are much needed by historical scholars for all provinces of the Empire. Mrs Brogan's book will be welcomed as a model of how the task should be done.

A. H. M. JONES

Jesus College, Cambridge

Some Documents regarding the Fulfilment and Interpretation of the Treaty of Brétigny (1361-1369). Ed. P. CHAPLAIS. *Anglo-French Negotiations at Bruges (1374-1377).* Ed. E. PERROY. (Camden Third Series, vol. LXXX. 1952.) This volume contains three sets of important documents. The first relates to Anglo-French negotiations, November 1361-November 1362 and clarifies an obscure phase of diplomacy. In his preface M. Chaplais gives ample guidance to the texts which include the entry books of the English envoys and royal instructions to them during their embassy in France, November 1361-March 1362, together with King John's instructions to the French envoys in England, March 1362. The documents record the failure of the English envoys and the circumstances which induced John to send a further embassy to England. The second set of documents deal with the opinions of the doctors of Bologna on the sovereignty of Aquitaine (1369). While the French delayed renunciation of sovereignty over Aquitaine Edward III created the Principality of Aquitaine in order to assert his effective authority there. The French, regarding this exercise of sovereignty as a contravention of Brétigny, appealed to the lawyers of Bologna. Using more than one source M. Chaplais has given as complete a text as possible of the opinion of the doctors of Bologna on this matter. These two groups of texts are perhaps of immediate value to students of diplomacy rather than to the economic historian. On the other hand the third group, relating to the Anglo-French negotiations at Bruges, 1374-7, are of some importance to the economic historian, who might regard the dispute over Aquitaine as inevitable on commercial grounds alone. For the editor emphasizes what the text reveals, that in the eyes of contemporaries the Hundred Years War was a feudal dispute in which the sovereignty of Aquitaine was the major cause at issue. In an illuminating introduction Professor Perroy briefly reviews the failure of previous negotiations and shows why, although by the summer of 1374 circumstances again favoured mediation, the English and French views remained irreconcilable.

M. K. JAMES

London

Surveys of the Manors of Philip, first Earl of Pembroke and Montgomery 1631-2. Ed. ERIC KERRIDGE. (Wiltshire Archaeological and Natural History Society, Records Branch. Vol. ix. 1953. Pp. xiv + 178. 25s.) This edition of seventeen surveys of the Wiltshire estates of the Herbert family, made between 1631 and 1632, makes a valuable companion volume to the surveys of 1562, published by the Roxburghe Club in 1909. Since some of the same estates appear in both volumes, instructive comparisons are possible. Dr Kerridge, who edits the volume, supplies an indispensable glossary of unfamiliar terms, and a pleasingly

written introduction devoted to a discussion of the term *manor*, and the methods used in compiling a survey in the seventeenth century. As he rightly reminds us, the survey was put together in an office from a collection of older documents, not from personal inspection of the fields. All dead leases were expected to be cleared away and new ones inserted, but always the old rough-and-ready measurements of holdings reappeared as before. The best finished work was an up-to-date legal record, but it did not come up to the standards of a modern surveyor. The reader will regret the absence in the introduction of a brief guide to the characteristics of the region under survey. He is left to find out for himself that the surveys relate to the chalk areas of Wiltshire, and he is given no hint of how far the Earl of Pembroke's manors can be regarded as typical of that region. Yet the surveys create certain definite impressions which would increase in value if allowed to harden into generalizations. They suggest a region of medium and large farms, with but few of the tiny holdings of five acres and less which throng the clayland areas of the Midlands; a region where arable land still comprised the largest part of a man's holding, and where large sheep runs in the waste allowed unusually generous sheep stints on some manors. Sheep, indeed, seem to have been one of the pillars of husbandry in the area.

JOAN THIRSK

University College of Leicester

S.C. VAN KAMPEN. *De Rotterdamse Particuliere Scheepsbouw in de Tijd van de Republiek*. (Born-Assen, 1953. Pp. 244. No price.) Rotterdam shares with Amsterdam and Zaandam the distinction of having dictated, for a century at least, European fashions in shipbuilding. It was here that the famous three-masted 'flute', first launched at Hoorn, was developed as a general cargo carrier. From the 'flute' developed other types of carrier which caught the eye of foreign rivals, especially French and English. Dr van Kampen has given us a comprehensive and fully-documented account of the contribution of Rotterdam's private shipbuilders to this vital phase of Dutch economic growth. He discerns four periods of evolution. The first runs from the end of the sixteenth to the middle of the seventeenth century, and is a phase of expansion and technological progress. At this time the industry comprised some twenty undertakings, including some large and efficient ones. Then from 1650 Rotterdam began to feel the competition of the firms in the Zaan area. Of twenty-three yards working in 1650, only twelve were left in 1672 and even fewer by 1700. There seems to be no doubt that lower wages, lower rents and lower raw material prices on the Zaan were a powerful factor in this decline. With municipal help, the problems of wharfage and storage space were eased round 1700 and until the mid-eighteenth century the Rotterdam industry enjoyed a further phase of prosperity. Even so opinion was uneasy lest Rotterdam should be left behind England, France and Sweden in the race for technical supremacy. Hence, by a significant reversal of earlier practice (when Europe had often borrowed Dutch technical assistance) English technicians were appointed at the instigation of the Dutch Admiralties, while the Dutch East India Company began to copy English ship designs. Even these changes did not prevent the fourth and last of Dr van Kampen's periods (from 1750 to 1795) being a time of decline. A necessary concern with local and technical detail does not prevent Dr van Kampen from dealing clearly and firmly with the salient features of his industry—structure, finance and general vicissitudes; he succeeds too in illuminating the careers of some of the leading entrepreneurs. A full appendix of maps, ship designs, ship prices and a good bibliography round off a careful and informative study.

C. H. WILSON

Jesus College, Cambridge

JAMES E. HANDLEY. *Scottish Farming in the Eighteenth Century*. (Faber. 1953. Pp. 314. 25s.) This book restates a familiar thesis—that, in the second half of the eighteenth century Scottish agriculture was rapidly elevated from universal backwardness by the devoted efforts of a small band of improvers. Here, as elsewhere, this process is made to wear an isolated appearance that fits inadequately with all we know of a society already heaving, in all its activities, towards industrialism; certainly many aspects of the agrarian process—price history, market patterns, the tensions of increasing population, the spread of rural industry—still await their investigators. Moreover, Mr Handley has been content to rely mainly on the well-thumbed reports of the closing years of the century, his use of manuscript sources being strangely casual and unsystematic. This approach is the more disappointing in that he shows a literary skill and an, admittedly patchy, scholarship which deserve to be better aimed. Yet the present volume is not merely a repetition of earlier work: the account of early improving literature is more complete than any we yet have, and he gives us a cautious, balanced, and informative survey of Lowland agriculture at the end of the century, with adequate emphasis on regional differences (a survey, it must be said, that contrasts in these respects with his treatment of the Highlands). Unfortunately, the rewarding stretches are inadequately linked. In fact the major weakness of the work is that the argument is pursued, in different sections, at different levels of analysis. Roughly, it falls into three equal parts, the first and third of which consist of surveys of the old and of the new order; but these detailed accounts of ordinary farming life and technique, themselves of unequal merit, are connected only by a thin tale of the thought and work of a tiny band of pioneers, and we are never allowed to glimpse the broad movement of rural society into its new shapes. In the last few pages, a few clues to the nature of the process are scattered. Mr Handley talks, for example, of the ‘coming of the professional farmer’. Here, surely, is something crucial. Where did he come from? Why at this time? How did he fit among existing holders of land? We find little enlightenment on such questions in the preceding pages.

MALCOLM GRAY

University College of North Wales

E. A. DAVIES. *An Account of the Formation and Early Years of the Westminster Fire Office*. (Country Life, for the Westminster Fire Office, 1952. Pp. 90.) The Westminster Fire Office was formed in 1717 by a breakaway from the Hand-in-Hand Office of a group of subscribers resident in Westminster. It began with original subscriptions totalling £2,860 and confined its operations to London and an area within a radius of three miles from the office. By 1748 the radius was twenty-five miles, and in 1805 the whole of England and Wales was included. Mr Davies deals carefully with the early years, with the directors, clerks, auditors, and not least the firemen. Finally, he sketches the eighteenth-century investments and the growth of the business. An altogether admirable feature is the complete list of early documents available. Having whetted the appetite in this way, it is to be hoped that one day Mr Davies will write a complete history.

D. M. JOSLIN

Pembroke College, Cambridge

JAMES B. HEDGES. *The Browns of Providence Plantations*. Vol. I, *Colonial Years*. (Cambridge: Harvard University Press; London: Geoffrey Cumberlege. 1952. Pp. 379 + xviii. £2.) The Browns were trading in Rhode Island by the beginning of the eighteenth century, if not before, and their business is still going strong.

They do not destroy their papers and accounts like other firms; some 350,000 items have survived (many being preserved by Brown University out of gratitude to its founders). Professor Hedges is using this unheard-of store of material to write the firm's history in three volumes. This is the first, and carries the tale as far as about 1790. The Browns' story provides valuable confirmation of earlier attempts (based on sketchier records) to reconstruct the everyday life of colonial merchants. Lack of sound currency, coupled with the smallness of markets, forced the colonists to remain unspecialized, but to develop precocious skill in the art of exchange; even a craftsman had to work by 'book-keeping barter', while a merchant had to conduct his trade in a complex series of prolonged and roundabout transactions. True, the Browns valued their purchases in terms of money; but perhaps only one-fifth of the price might be paid in cash, the balance being laboriously settled in goods. One of the Browns' distinctive feats was to supplement this purely commercial traffic with manufacturing. They set up a chocolate mill, distilleries, a candle factory, and an iron furnace. Indeed, the Browns may have come to regard manufacturing as their primary concern, and their elaborate trade as a mere ancillary. The diversity of the Browns' functions was so great that, almost inevitably, Professor Hedges has dealt with each of the firm's functions or departments in separate chapters. We thus tend to lose sight of the 'house' and its owners, but to get an excellent view of the detail. We read first-hand accounts of the frustrations and disappointments that dogged Yankee captains in the Caribbean; of ludicrous 'flag of truce' dealings with the king's enemies; of the miseries of the slave trade; of the subtleties and dishonesties attendant on smuggling; of the difficulties that faced early industrialists; and of the Browns' attempts to organize buyers' and sellers' 'rings' such as the notorious 'Spermaceti Trust'. The Revolution brought this diffuse trade to an abrupt end. The old methods proved unworkable when peace was restored. However, the Browns had the personal qualities needed for a fresh start; and their capital had not grown any less during the war, thanks to their success as makers of cannon and speculators in depreciated government securities. We are left wondering, with lively anticipation, what the sequel will show.

W. T. BAXTER

London School of Economics

ANDRÉ J. BOURDE. *The Influence of England on the French Agronomes, 1750-1789*. (Cambridge University Press. 1953. Pp. 250. 31s. 6d.) English agrarian influences percolated into France from many sources: exiled Jacobites, aristocratic visitors to the equestrian school at Angers and the return traffic of French travellers who came to regard the English tour 'as a rule of intellectual life'. There were also English settlers, like the two brewers near Calais who 'dazzled the eyes' of their neighbours with their 'culture Anglaise'. But Dr Bourde attaches most importance to the writing of Duhamel du Monceau's *Traité de la Culture des Terres suivant les principes de M. Tull, Anglais*, which appeared in six volumes from 1750 to 1756. It excited a furore of discussion which is faithfully reported by Dr Bourde in his first six chapters; and we are left wondering whether the cult of Tull and Tullism deserves this display of bibliographical virtuosity. We become a little weary of the dust of controversy and long for the whiff of the farm-yard. We get it from time to time in the subsequent chapters: discussions on the importance of roots and permanent pastures, the relative merits of keeping sheep in sheds (partly as a protection against wolves) or in open pastures—'l'éducation sauvage'—as in England; on the sizes of farms, on implements, animals, crops. But we are still in the region of the contact of minds rather than of accepted farm practice. The Tullian plough and drill failed to catch on; the lack of capital, the taxation of improved values (in

contrast with the taxation of the land itself as in England), the multitude of smallholders and above all the absence of an improving squirearchy, made drastic change impossible and Dr Bourde admits that his book belongs more to the history of ideas than of agriculture. But it was well worth doing; he has opened a window which cannot again be closed on the French agricultural scene and has shown once more the wealth of French resources for comparative agrarian study. There is a certain repetitiousness in his early chapters, as though he is trying to get an extra bang out of the rather punctured Tullian drum; there is a little confusion in his excellent bibliography through the indexing of items under Christian names in some cases; but he has done English students of agrarian history a great service and provided one reader with the nearest available substitute for a holiday in rural France.

J. D. CHAMBERS

University of Nottingham

T. S. ASHTON and R. S. SAYERS (eds.). *Papers in English Monetary History*. (Oxford University Press: Geoffrey Cumberlege. 1953. Pp. 167. 16s.) This book comprises reprints of eleven papers which have been published at various times between 1937 and 1953. All of them are important, and there is quite sufficient unity of theme between them to make it very convenient to have them under a single cover. They all deal with subjects in the period 1775 to 1914, and the first eight are all prior to 1850. The history of monetary theory is represented by Mr Horsfield's two papers on the duties of a banker, Professor Fetter on the Bullion Report and Professor Sayers on Ricardo as a monetary theorist. The last is a recent assessment made in the light of Mr Sraffa's definitive edition of Ricardo's works. It is very interesting to read these four papers together, especially for the light they throw on the views and influence of Ricardo. Professor Fetter shows him to have had less influence than was formerly believed in the controversies over the Bullion Report, but Professor Sayers shows that his posthumous influence on the Currency School and the Bank Charter Act of 1844 was even greater than he is usually credited with. On the institutional side there is Professor Ashton's paper on the use of the small bill of exchange in Lancashire, and the letters of Miss Marianne Thornton to Miss Hannah More on the crisis of 1825, which were recently published in *The Three Banks Review*. These highly interesting letters tell the detailed story of the failure of Sir Peter Pole and Co. (Henry Thornton's firm) and of the entry of Henry Thornton junior into partnership with Williams and Deacon. They also throw further light on the action taken by the Bank of England in connexion with the failure, which is briefly described by Sir John Clapham. Two further papers from Mr Horsfield deal with the operation by the Bank of England of the so-called 'Palmer rule' and with the origins of the Bank Charter Act, while a retrospective view of the working of that Act is provided by the late Professor Barrett Whale. Professor Sayers's *Bank of England Operations, 1890-1914* was a war casualty, the entire publisher's stock being destroyed in an air raid. It is a great pity that we cannot have a reprint of the whole book, but failing that, the chapter on the Bank and the gold market makes a welcome appearance here. Last, but very far from least, is another paper from Professor Whale, on the working of the pre-war gold standard. In brief his thesis is that gold movements may have been due, at least in part, not to the changes in interest rates and prices, as is supposed in classical theory, but to changes in the domestic demand for money arising from changes in national income which, in turn, were brought about by changes in exports. The paper raises many interesting theoretical points, and it is to be hoped that this reprint will be the means of securing it a wider measure of attention from the theorists than it has yet received.

E. VICTOR MORGAN

University College of Swansea

SARAH C. GILLESPIE. *A Hundred Years of Progress. The Record of the Scottish Typographical Association, 1853-1952*. (Robert Maclehose and Co. Ltd., Glasgow. 1953. Pp. xii + 268.) This is an ably written fragment of economic history which contains much more than most such studies to interest the student of the nineteenth century. Miss Gillespie concentrates her attention on those details of wages and hours of work which were the chief preoccupation of nineteenth-century trade unionists, but she does not lose sight of other and in some respects more interesting topics: the employment of women, the advent of machinery, the limitation of apprentices, and so on. Much of the history of the Scottish Typographical Association follows a familiar pattern, but this book enlarges our knowledge in two ways especially. First, Miss Gillespie has something to say about the development and about the evils of the traditional 'tramping system'. The Association almost from its beginning had a good deal to say about it and little that was favourable: 'When a man once acquires the habits of the road, he is compelled, through force of circumstances, to adopt it as his calling' (quoted, p. 79). Secondly, it is shown how out of this system there developed local 'provident schemes' and ultimately, in 1882, a national (i.e. Scottish) scheme; how the national provision was latterly supplemented in some districts, and how this policy was retained with respect to State unemployment benefit between the wars; and how one consequence of this was that subscriptions tended to vary inversely, and hence earnings to vary positively, with the state of trade. All in all, this is an admirable little study; and, as is only fitting, it leaves, typographically, nothing to be desired.

A. J. YOUNGSON BROWN

Emmanuel College, Cambridge

HAROLD C. PASSER. *The Electrical Manufacturers, 1875-1900*. (Harvard University Press. London: Geoffrey Cumberlege. 1953. Pp. xviii + 412. 40s.) This book is divided into three parts. The history of arc lighting (Part I), of incandescent lighting (Part II), and of electric power (Part III). Other sides of the electrical industry are not touched upon. The treatment in the first two parts is much fuller up to 1890 than to 1900. Parts II and III are, on the whole, more interesting than Part I. The sub-title of the book is 'A Study in Competition, Entrepreneurship, Technical Change, and Economic Growth', and this must raise the reader's hopes that he has in his hands a study which concentrates attention on trying to explain why the industry developed as it did and as fast as it did. These hopes are not altogether fulfilled, although Professor Passer does offer something new and something based on Schumpeterian ideas of the difficulty and importance of the 'act of innovation', the 'creative response' by entrepreneurs to certain situations. Professor Passer is at his most interesting in dealing with entrepreneurship. He lays especial emphasis on the double problem faced by innovators—that of finding out how to produce something, and that of marketing the resultant product; and he underlines the fact that a conviction that a market exists is a prerequisite to innovation, and that an understanding of the precise nature of this market is essential if the innovator's preliminary work is to be successful. In Edison he has a wonderful example of an inventor-cum-entrepreneur of genius who gauged potential markets to a nicety before he finally committed himself. The development of electric railways by Sprague in the 1880's shows some of the same market-mindedness. On competition Professor Passer is also interesting, emphasizing the significance of enormous quantity of litigation in the industry, and the extinction of competition except among a very few firms. The author's conclusion, however, that there was price as well as product competition (p. 354) does not seem well supported by the evidence. The real weakness of the book—and it is a rather fundamental

one—lies in its neglect of the ever-changing economic background. We are scarcely informed, for example—the author, even, seems himself scarcely aware—that General Electric was not the only merger accomplished in the last years of the 1880's, or that strong price competition was a good deal more likely in the mid-1890's than ten years earlier or ten years later. Some suggestive information is provided about the sources of investment funds, but that is about all. The electrical industry is thus left to grow in a kind of splendid isolation, neither influenced by nor influencing the concomitant growth of other markets; so that although we seem to advance in one direction under the banner of Schumpeter, we seem to retrogress at least as far in another (suffering, apparently, from an unexpected recurrence of that painful and enervating complaint, long period partial disequilibrium analysis). Professor Passer thus fails to make the point, implicit in his own evidence, that a widespread interest in and enthusiasm for innovations in the American economy of that period speeded the development, widened the markets and enhanced the profitability of new commercial ideas. Nevertheless, this is an informative, admirably documented and thought-provoking book.

A. J. YOUNGSON BROWN

Emmanuel College, Cambridge

D. A. MACGIBBON. *The Canadian Grain Trade 1931-51*. (Toronto University Press; London: Geoffrey Cumberlege. 1952. Pp. viii+227. 36s.) This is a straightforward and objective study, which within its limits will be a standard work on its subject. It tells its story with adequate explanations of the background of successive developments, and with occasional, one almost feels unnecessarily restrained, comment. No real attempt is made to supply the economist with answers to the more fundamental questions which present themselves, but Professor MacGibbon can presumably plead that economic history rather than economics was his objective. The structure of the book, however, and the method of exposition are open to criticism. Professor MacGibbon has chosen to tell his story first in broad though reasonably comprehensive outline, and then subsequently to embroider particular topics. Thus Chapter I paints a lively picture, in as little as seventeen pages, of the effects of the 1930 depression on the farming communities of the three prairie provinces. Chapter II introduces government intervention, and includes a good analysis of the influences of the Ottawa wheat preference, and an account of the 1933 International Wheat Agreement about which, however, Professor MacGibbon can add little to our existing knowledge, incomplete though it is commonly supposed to be. The story is then continued in Chapters III and IV up to the end of the war. These chapters are in a sense the core of the book, and reach a high standard of historical exposition. So far, so good, and all in sixty-six pages! But now the scheme of the book alters, and Chapter V goes back and fills out the history of the 1930's from the standpoint of the pools, adds further study of Mr McFarland's policy and operations in liquidating the surplus stocks, and then passes to the pools' taxation issue; and Chapter VI gives a further study of the Wheat Board. The next two chapters then pick up the story from 1945; Chapter VII on the British Wheat Agreement is a studiously impartial account and the analysis of the Canadian Government's reasons for accepting the agreement is interesting. Chapter VIII relates the long negotiations over the International Wheat Agreement, but since the date of the book's preface is August 1951, it is not to be expected that Professor MacGibbon could examine its working. Chapter IX brings up to date the story of the Wheat Board and the extension of its sphere to oats and barley. And finally there are three chapters dealing respectively with the internal history of the three wheat pools throughout the period, with the independent co-operative organization United Grain Growers, and with the

Winnipeg market, each of which might almost stand as an essay on its own. This method may be the most effective way of making this study, but it does not seem altogether happy or comfortable for the reader. Personally I wish Professor MacGibbon had somehow given his study a more unified handling. But this criticism does not alter the fact that this is a most useful and interesting work, and incidentally one which could hardly have been so well done if the author had not spent so many years in such a favourable observation post as the Board of Grain Commissioners.

J. W. F. ROWE

Pembroke College, Cambridge

J. RICHARDS PETRIE. *The Taxation of Corporate Income in Canada*. (University of Toronto Press; London: Geoffrey Cumberlege. 1952. Pp. xvii + 380. 55s.) This is a large-scale work published under the auspices of the Canadian Tax Foundation, a private research organization set up in 1946 on the model of a long established parallel organization in the U.S.A. Mr Petrie's approach is that of the business man rather than that of the academic economist. He takes a conservative view of the purposes and possibilities of taxation: taxes are there to raise revenue and nothing else. Mr Petrie is thus sceptical—much more sceptical than many of his compatriots, both in Ottawa and elsewhere—of the possibilities of taxation as an instrument of compensatory finance. Nevertheless, the apparent fury of the inflationary pressure in the early stages of the Korean boom to some extent broke down Mr Petrie's defences. In what is effectively an epilogue he is prepared to see a substantial budget surplus forced as a means of controlling inflation in a cold war, circumstances in which the more powerful direct controls proper to a hot war cannot easily be made available. It is clear that the taxation of companies in Canada raises some difficult problems. The Corporation tax is imposed at levels that are high in themselves and more particularly in relation to the personal scale. Further, like many Canadian institutions, corporate tax practice derives partly from British and partly from American concepts, two widely different systems which are by no means always compatible. For instance, Canadian income and profits taxes, following British practice (largely through the interpretations of the Appeal Courts), do not tax capital gains, and Canadians seem content to leave them free; but the retrospective taxation of accumulated undistributed profits has been so fierce as almost to ruin small companies on occasion. It is only recently that a partial solution has been found for this difficulty by a periodic low rate tax on past undistributed profits. One difficulty here would seem to be the absence in Canada of a legal entity parallel to the British Private Company. Mr Petrie is well-read in the voluminous American literature on corporate taxation, from which he makes many quotations. Unfortunately he is less familiar with British practice, perhaps because the literature is harder to come by. This is a pity, because on several occasions he seems to be groping for a solution which could almost certainly be reached by an adaptation of British practice. An example of this is the 'integration' of personal income tax and tax on undistributed profits, achieved in Britain by 'stopping at the source' tax on dividends (in U.S. parlance giving personal taxpayers a 100 per cent credit). This time-honoured system does not (as Mr Petrie imagines) give rise to difficulties when tax rates are suddenly changed (since the rate of withholding is retrospectively adjusted in the next dividend), nor to enormous payments of tax overpaid by small dividend receivers. This latter, however, is bound up with the relation of personal and profits tax rates. It would seem that Canada might be well advised to reconsider this on several grounds.

URSULA K. HICKS

Oxford

LILIAN J. REDSTONE and FRANCIS W. STEER (eds.). *Local Records, their Nature and Care*. (G. Bell and Sons Ltd. 1953. Pp. xvi+246. 25s.) This severely practical handbook has been compiled by thirty-five distinguished members of the Society of Local Archivists, whose names, listed in the preliminary pages, guarantee the authoritative nature of the work. Arranged under four main headings: The Local Record Office, the Archivist at Work, Notes on Local Records, and Co-operation between local and central organizations, the contents deal with every aspect of the archivist's professional work. There was room for such a manual, for in all but eight counties record offices have been established within the last thirty years. The aspirant to what is in effect a new branch of the public service is fairly warned that the higher he climbs, the fewer will be his opportunities for personal research. 'The County Archivist's time is almost entirely swallowed up with correspondence, interviews, attendance at meetings, telephone conversations, arranging or being present at exhibitions, and negotiating with prospective depositors.' One of the contributors—one would like to know which—thinks it necessary to remind lecturers that 'local history is a very human and appealing subject', and bids them therefore 'incorporate touches of humour and pathos' into their discourses.

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LIST OF BOOKS AND ARTICLES ON MEDIEVAL ECONOMIC HISTORY OF FRANCE PUBLISHED IN FRANCE, 1950-2¹

COMPILED BY PH. WOLFF

The last similar list was published in *Economic History Review*, 2nd ser. II (1949), 218.

I. GENERAL WORKS

1. BIBLIOGRAPHIES

- COPPOLANI, J. 'Bibliographie de la France méridionale, publications de l'année 1949' (*Ann. Midi*, 1950, pp. 359-402); '...de l'année 1950' (*ibid.* 1951, pp. 361-407); '...de l'année 1951' (*ibid.* 1952, pp. 373-427). (Covers 37 'départements', and includes sections devoted to the economic history.)
- GANDILHON, R. and SAMARAN, CH. *Bibliographie générale des travaux historiques et archéologiques publiés par les Sociétés savantes de la France*, vol. II, *Dordogne to Lozère*, and vol. III, *Maine-et-Loire to Bas-Rhin* (3 vols.; Paris, P.U.F., 1950-3).

2. GENERAL WORKS

- IX^e Congrès International des Sciences Historiques, Paris, 28 août—3 septembre 1950*, vol. I, *Rapports*, and vol. II, *Actes* (Paris, Colin, 1950-1).
- HEATON, HERBERT. *Histoire économique de l'Europe*, vol. I, *Des origines à 1750* (Paris, Colin, 1950).
- LEMOSSÉ, M. and BOULET, M. *Le commerce dans l'ancien monde jusqu'à la fin du XV^e siècle* (Paris, S.P.I.D. 1950).
- VAN DER MEER, F. *Atlas de la civilisation occidentale* (Paris, Elsevier, 1952).

¹ This list should be used in conjunction with Mr Paul Leuilliot's bibliographical article on modern writings, *Econ. Hist. Rev.* 2nd ser. V (1953), 400.

3. WORKS DEALING WITH CERTAIN PERIODS

- HALPERIN, J. 'Les transformations économiques aux XII^e et XIII^e siècles' (*Rev. d'hist. écon. et sociale*, 1950, nos. 1 and 2).
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 SALIN, E. *La civilisation mérovingienne d'après les sépultures, les textes et le laboratoire*, vol. 1, *Les idées et les faits* (Paris, Picard, 1950).

4. REGIONAL WORKS

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II. DEMOGRAPHY

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III. RURAL HISTORY

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- BLOCH, M. *Les caractères originaux de l'histoire rurale française* (new edition; Paris, Colin, 1951).
 GRAND, R. and DELATOCHE, R. *L'agriculture au Moyen Âge* (Paris, de Boccard, 1950).

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3. COLONIZATION

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